THE NOVA SCOTIA MEDICAL BULLETIN

Recreation: A New Aspect of Preventive Medicine

"Good Health" can be defined as the maximum level of physical, mental and emotional fitness. Despite increasing sums of money being spent on hospitals and medicare programs, it is apparent that "good health" is rare in North America. One must ask why this has happened, and are physicians in any way responsible.

The advances in medicine and surgery of the past three decades have been impressive to the profession and lay public alike. But what has happened to preventive medicine? Preventive medicine has been and is responsible for vastly improved health levels throughout the world, usually by control of communicable diseases.

The time may have arrived for a new look at preventive medicine programs, when one looks at current health problems in Canada, such as:

1. Obesity.
2. Cardiovascular degenerative diseases of epidemic proportions.
3. Increasing leisure time.
4. Physical fitness levels that start declining at about age six years.
5. Urbanization, with its attendant socio-economic ills.

Medical schools and practising physicians must re-examine their roles. Do medical school curricula include sufficient consideration of any of the problems listed above? The seemingly simple topic of physical fitness is an example. Shouldn't regular time be given to physical fitness programs for medical students? Vigorous exercise in leisure time may reduce the risk of coronary artery disease by two-thirds (J. N. Morris, Lancet, Feb. 17, 1973). The situation in Nova Scotia public schools is no better, where 43% of students from primary to grade six are in schools with no physical education facilities! This is only one surprising fact revealed in the February, 1973, study of health care released by the Nova Scotia Council of Health.

The life style of Canadians is such that one wonders if increasing leisure time will only result in a further decline in "good health". If this observation is true, new attitudes must be generated, attitudes concerned with the overall quality of life. Attitudinal changes are not easily brought about, but educational institutions are obvious focal points. Medical educators must make a start in this direction. Individual physicians can show leadership in local school boards, local recreation councils (where these exist), in an effort to promote awareness of the current problems in preventive medicine.

I believe the time has arrived for a full scale conference on Physical Activity and Recreation in Nova Scotia. Perhaps Dalhousie Medical School could show leadership in calling this conference, which could include the many persons interested in what I have described as current problems in preventive medicine. The Dalhousie Physical Education Faculty, the new Nova Scotia Provincial Department of Recreation, the Department of Education, and Federal Government representatives would be among those persons who should be invited to attend. The objectives of the conference could include the identification of the priority areas of preventive medicine in its broadest aspects, and the establishment of working groups of interdisciplinary members. We must soon make a start at introducing into our education system at all levels concepts of the quality of life which we desire, and the opportunities for life long pursuit of such quality. □

C. E. Kinley, M.D.
President, Sport Nova Scotia

Assessing Suicidal Risk

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Most physicians are aware of the steady increase in suicide rates in recent years in Canada and in most developed countries. Physicians in practise can't but be aware of the dramatic increase in what has been called "suicide attempts", most commonly, self-poisonings with overdoses of medications. So much literature has appeared in the journals during the past few years from Suicide Prevention Centres, that it would seem to be a simple matter now for the physician who thinks of it, and, who takes the time, to assess and predict suicidal tendencies. Unfortunately, this is not the case. Even experienced psychiatrists, as Hirsch and Dunsworth pointed out in a recent paper, "feel very uncertain when called upon to deal with patients threatening suicide".[1] Assessing suicidal risk is still a difficult and challenging endeavor and particularly so when one considers the irrevocable consequences of mistaken judgement. Yet in spite of the problems involved, we must do our best to prevent the self-injury of our patients. It might help if we remind ourselves of some of the danger signals – factors or circumstances where the risk of suicide is considerably increased:

1. While suicidal thoughts and gestures do not always mean an underlying depression, depression should be carefully considered. The depression may be masked by the presentation of somatic symptoms or equivalents, that is, a change in the sleep, appetite, and drive pattern of the patient with variation of the mood during the day. During the acute phase of serious illness and injury, it is sometimes easy to overlook the fact that the patient may also by seriously depressed with suicidal rumination.
2. Feelings of anger and frustration are often severe enough that the patient will consider self-destruction as "the only way out".
3. In the late teen-age patient, a marked change in personality with a worsening of academic performance and a loss of interest may be accompanied by serious suicidal thoughts.
4. Chronically ill and isolated persons who may feel very much alone or abandoned. They will often speak in terms of "having no one" or of "no one caring" for them. On inquiry, they often seem to have no real supporting relationship with any person. These are to be considered a serious suicidal risk.
5. Any patient who seems greatly preoccupied with suicidal thoughts. The thoughts are described as recurring and are constantly in the patient's mind.
6. Patients who have made previous suicidal attempts or previous suicidal threats or have given a history of having acted impulsively. These patients may impulsively attempt suicide when frustrated by some relatively minor event.
7. Patients who abuse alcohol and/or drugs are always an increased risk because they may attempt suicide either during or following an intoxication experience.
8. There is an increased risk statistically in bereaved persons and in those with a family history of suicide.
9. Patients who are suffering from an acute brain syndrome (delirium) often will seriously harm themselves because of the clouding of consciousness and impaired intellectual functions. Although one could debate whether or not they are "suicidal", a number of patients have killed themselves during these acute psychotic episodes.
10. Life crises – marriage breakdown, loss of earning power, unemployment, the feeling by the patient that he is no longer of use for anything or to anyone or that he has been pushed aside, are often accompanied by helplessness and serious despair.

The hazards in assessment of the patient can spring from many sources. The physician may not have sufficient time to get a good rapport with the patient so that he doesn't get to fully understand how badly the patient feels. Furthermore, many patients will use denial and repression so that even if one directly asks for suicidal thoughts, the patients will deny that they have any. Sometimes physicians may ignore the seriousness of an attempt because the patient has made previous suicidal attempts and may be considered simply as "looking for attention". It is particularly difficult to assess suicidal risk following an overdose of tranquillizers. One should wait until the patient is fully conscious before assessing the mental status of the patient including the issue of suicide.

Finally, the best prophylaxis against suicide is a good affective relationship between the patient and his physician who can offer hope through his interest and help. □

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Reference

[1] Canadian Psychiatric Association Journal, Vol. 18, page 107, 1973.

Drunk Driving - A Crime, Not Just an Offence

In San Salvador they sometimes shoot them – unofficially, of course, because San Salvador is not a respondent to the NATO questionnaire on the relation of alcohol to highway safety.

Further north, Bermuda's Commissioner of Police "Nobby" Clark will not refer to the "impaired driver." He prefers the term "drunk driver." And although they don't shoot drunk drivers in Bermuda, the meting out of jail sentences without fear or favor is not uncommon.

We don't shoot drunk drivers in Nova Scotia, either.

Unfortunately, though, they take the same shotgun approach to pedestrians and other road-users that inebriated vehicle operators of any nationality do. The name of the game is the same right here at home with an abundance of organic and/or inorganic target objects at the drunk driver's disposal.

And there are some jolly spin-off effects, too.

Consider this for example: Halifax's Victoria General Hospital is fast becoming a super-specialized emergency hospital. Elective admissions are down because there just isn't room. Meanwhile, emergency admissions have something more than just a hint of fender and ferocity about them. With vivid recollections of last summer's nursing shortage there is also real concern about long-term planning to provide adequate staffing in the future for management not only of the increasing flood of emergencies, but all other hospital patients. Present staff is kept extremely busy.

In fact, all of Nova Scotia's health care personnel have their hands pretty well full at this time. And their services cost money, a lot of money. So do ambulance and police services.

Ideally, we'd like to spend the money on "elective patients" who cannot be adequately investigated or treated outside the hospital. We would like to commit the money and staff to Mrs. John Doe's medical or surgical problems or to the appropriate procedures which will give some youngster a fair crack at life.

Sorry. Some 80 mph drunk did his best to write a family off on his or her way to God alone knows where.

Sorry, Mrs. Doe. Sorry, kids. We have highway accident victims in your beds. Of course, they are sorry, too. And we can only hope the person who put them there is sorry. In fact, it's a pretty sorry situation all around.

How do we correct it?

In Norway, drivers found to have a blood alcohol level of .05 – as opposed to .08 in Nova Scotia – face a mandatory jail term of not less than 21 days, and the courts have the option to up the ante.

In Sweden they're just as tough. A blood alcohol level of between .05 and .15 can bring a maximum jail term of six months along with a fine equal to ten days pay. Anything over .15 strips the offender of 25 days pay plus the appropriate jail sentence.

And so it goes.

In Great Britain, through indictment or summary conviction, the offending driver can be staring at a jail sentence of from four months to two years – although the and/or approach is taken in equating fines and the lock-up.

Maybe we in Canada should take a closer look at the methods used by the Scandinavian countries to discourage the "four-wheel highball."

Perhaps our police should be empowered to take blood alcohol tests at the scene of a suspected infraction. Or, perhaps they should be empowered to transport the suspected offender to the nearest physician who would be obliged under law to perform the test.

Perhaps, too, our courts should start looking at the maximum end of the punitive scale when an offender is brought before the bench. And perhaps our government should be telling us all that from here on in the "slammer" awaits.

This sounds like a pretty harsh tack to take, and repressive measures aren't really our style. But, come to think of it, neither is murder. Yet that's what the drunk driver, wittingly or unwittingly, is setting out to do.

Drunk driving is not an offence. It is a crime, designated under statute. Let's treat it as a very serious crime indeed; not so much as a quest for law and order but, rather, as a demand for law and life. □

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Reference to these guidelines and recent issues of the Bulletin will help authors in preparation of their papers. Send the original typed copy to the Editor and keep a carbon copy.

The entire manuscript (including references and tables) should be typed double-spaced, with a generous margin on the left, on only one side of the pages. Do not underline unless the type is to be set in italics. Standard abbreviations (**e.g.**, hr, mg, ml) are acceptable without definition; less-common abbreviations should be written in full the first time they are used. Give generic as well as proprietary names and the manufacturer's name for drugs.

References. Identify references by numbers within the text, and list them in numerical order on a separate sheet [see (f)].

Figures. Provide an unmounted glossy print of each, clearly marked on the back with a SOFT marker, indicating top, figure no., and author's name. Show scale when relevant. Do not write legends on them [see (h)].

The usual framework of a paper is as given in (a) to (h) below, starting each section on a new page and numbering pages consecutively to the end of (h).

a) Front page, showing title, author(s) and degrees, whether the author is in family practice or the institution where the work was done, and address for correspondence.

b) Brief summary.

c) Introduction.

d) Materials and methods, then Results; **or** Case report.

e) Discussion.

f) References.

Examples: **Journal papers** – EBBERT, A., Jr. Two-way radio in medical education. J. Med. Educ. 38:319-28, 1963. **Books** – MAJOR, R. H., and OELP, M.H. Physical Diagnosis, 6th ed. Philadelphia, Saunders, 1962, p. 51. **Contributions in books** – Voheer, H. Disorders of uterine function during pregnancy, labor, and puerperium. **In:** Pathophysiology of Gestation, ed. by N.S. Assali. New York, Academic Press, 1972, vol. 1, pp. 145-268.

g) Tables (each, including heading and footnotes, on a separate page).

h) Figure legends (all listed on one page); state magnification of photomicrographs.

Suicide and Suicide Attempts in Metro Halifax*

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An attempt was made to gather data from hospitals, doctors, clergymen, police and all relevant agencies, on the number of suicides, suicide attempts, suicide gestures and patients with suicide drive significant enough to warrant getting help, in Metro Halifax. It was thought that since almost all psychiatric emergencies are seen at one hospital, (Victoria General Hospital) and since most of the practising psychiatrists are a fairly closely knit group associated with the University Medical School, it might be possible to gather a fairly complete and reliable picture of the extent of suicide activity and efforts designed to deal with the situation. The attempt was only partly successful. Accurate information was obtained only from hospital records, autopsy records, or by individual discussion with physicians. Most, but not all psychiatrists answered questionnaires and very few other physicians or clergymen answered at all.

It was very difficult to obtain and interpret data even about apparently clear-cut deaths by suicide. After much difficulty, regular data was obtained from the Coroners and this, plus checking gossip and rumors which often turned out to be correct, seemed to provide fairly complete statistics. Even including those cases where unconscious suicidal intent might play some part, for example in motor vehicle accidents, it was very difficult to decide if a self-inflicted death was not partly determined by chance or accident. The writer has become highly skeptical of suicide statistics, except in those areas where special techniques have been developed to check each possible case very carefully.

The 41 cases listed as suicides were either certain, or almost certain. In addition there were 15 which might be classified as probable or possible. They are not included in the statistics.

TABLE I

Suicide in Halifax County – Population – 260,000

Age	Total (Male & Female) No.	Rate per 100,000	Male No.	Rate per 100,000	Female No.	Rate per 100,000
0-19	4	3.8	4	7.5	0	0
20-39	23	28.5	16	39.6	7	17.3
40-59	9	17.7	9	35.8	0	0
60-79	5	22.3	2	19.6	3	24.6
TOTAL:	41	15.8	31	23.5	10	7.7

The incidence of certain or almost certain suicide from December 1st, 1971 to November 30th, 1972 was 15.8 per 100,000. There was the usual preponderance of males over females with 31 males suicides and 10 females. The male rate was 23.5 per 100,000 and the female rate 7.7 per 100,000.

The most striking feature was the higher rate in younger than older men. The rate for males 20 to 39 was 39.6 per 100,000 and the rate for *40 to 59* was *35.8* per *100,000.* The rate for ages 60 to 79 was 19.6. The female rate for ages 20 to 39 was 17.3 per 100,000 and curiously, there were no female suicides in the *40 to 59 age group.* The total figures are too small for accurate conclusions, but the data suggests that, as several recent reports have indicated, there is a change in the pattern with younger males having the highest risk. There is no obvious reason for this change. The 1967 suicide rate for Canada is given as 9.0 per 100,000.*

The methods used for suicide were shooting, hanging, poisons, drownings, stabbing and jumping from heights. By far the commonest method was shooting, used by 17 males and 2 females. In striking contrast the method used by the doubtful cases was primarily overdosage which was used by 11 of 15 cases.

It was possible to obtain detailed data in only *15* cases, usually those treated by psychiatrists within the university group. Many of these had seen a psychiatrist within a few days or weeks prior to the suicide. The physician concerned was aware that the patient was a suicide risk, but felt that there was little he could do to alleviate this. In addition, it was often very difficult to say that the risk was higher than it had been in the same patient previously, or for that matter, higher than for many patients who are treated as outpatients.

It is worth reporting two cases briefly:

(1) A 23-year-old single male was receiving intensive psychotherapy. He was a very schizoid, futile man who had made 3 previous serious suicide attempts. His physician, fully aware of the serious risk of suicide, had an understanding with the patient – the patient had promised him that he would not impulsively commit suicide and that if he had a strong suicide desire, he would call the physician. The patient committed suicide on the day following his last therapeutic session. Both the doctor and the family, when reviewing the situation, felt there was nothing they could do to have changed the tragic events.

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*More recent figures are now available and reveal a marked fluctuation in the suicide rate. The official rates for Nova Scotia and for Canada in recent years will be published in the next issue of the Bulletin.

(2) The second case is a thirty-year-old male who was also being seen by a psychiatrist and again, it was known to the psychiatrist and the patient's wife that he was a serious suicidal risk. The patient committed suicide sometime after his second visit and again the psychiatrist, on reviewing the situation, felt there was nothing that could have been done.

In at least two other cases the patient committed suicide while in therapy a few days prior to an appointment with his psychiatrist. It was known by the doctor and the family that there was some risk of suicide, but the suicide came as a surprise because there was no evidence of any increased suicide drive at the time. Many of the cases had a history of long-standing personality disorder with excessive use of drugs and/or alcohol.

It now appears likely that there has been no significant change in suicide rates in most areas where suicide prevention programs have been operating for several years. In fact, some suicide prevention programs have found an actual increase in the rate of suicide immediately following the opening of the service. The most recent literature suggests a broadening of prevention measures, e.g. education of the general public and broad social action programs.

It would appear logical to state that psychiatric treatment must prevent some suicides, since one of the major illnesses responsible for suicide, severe depression, usually responds readily to therapy. It is the writer's impression, however, that only a small number of the suicides in this study occurred in patients with primarily typical depressive illnesses. Depression was present very often, but usually only as part of the total psychiatric picture. As I have stated previously, it seems realistic to conclude that most cases of suicide are not preventable by any technique known at the present time. Intensive study of the problem must of course continue.

SUICIDE IDEAS, GESTURES AND ATTEMPTS

Various attempts have been made to classify these and none are wholly satisfactory. The following was found to be a practical approach primarily applied to patients seen in hospital emergency facilities:

1. **Suicide ideas:** Ideas without any suicide attempt, sufficiently serious to be a major reason for bringing the patient to an emergency facility and in which hospitalization or other special care is required.

2. **Suicide gesture:** Overt behavior clearly not intended to endanger life.

3. **Suicide attempt:** Behavior clearly based on significant suicide intent and usually endangering health or life.

The data on patients in these categories are very inaccurate. Some of the reasons for this are:

a) It is often difficult or impossible to assess the exact degree of suicide intent.

b) A large number of patients were seen where an excess of drugs was taken, or other possible suicide activity carried out, in whom it was impossible to assess if it was by intent or accident. This included many patients who had taken alcohol in addition to drugs.

c) In general the figures are too low because some psychiatrists and many physicians, clergymen, etc., did not answer the questionnaire.

The figures are based on data obtained in a three-month period, adjusted so that rates per year could be obtained.

Significant suicide drive without overt suicidal behavior - 136 i.e. 52/100,000

Suicide gestures 368 i.e. 142/100,000

Suicide attempts 336 i.e. 129/100,000

Total gestures and attempts – 704 per year

Ratio of *gesture & attempts* to *suicide* – $\frac{704}{41} = 17.5:1$

The ratio of females to males was approximately 1.5:1

There was one suicide attempt under age 10.

90% of patients making gestures or attempts were under age 40.

The number in the age group 0 – 25 equalled the number in age groups over 25. More than 3/4 of attempts and gestures were overdoses.

Approximately 200 patients per month come to the V.G. Emergency Room for primarily psychiatric reasons, constituting approximately 6% of the total number of emergencies. About 1/3 of psychiatric patients come because of drug overdose in addition to those with suicidal ideas.

Suicide behavior and ideas are the commonest reason for patients to come to our Emergency facilities for psychiatric reasons. Dr. Jean Gray, our Internist in charge medically of all overdose cases, reports that, in the four months, Feb. 1st to May 31st, 1973, 43 cases of overdosage were admitted. Of these, 3 were seriously ill medically and were also considered to have been seriously suicidal. Most of the remainder were thought to have made suicidal gestures. Of the three seriously ill patients, 1 had taken large amounts of Isoniazid; 1, large amounts of a variety of tranquilizers and pain relievers and the third had taken Etrafon and various other drugs.

As has often been mentioned in the literature, overdosage with tricyclic antidepressants is notoriously difficult to treat. 8 of the 43 patients had taken overdosages of this type of drug. Arrhythmias may occur up to 7 days after the intake of the drug. The poison centre for children in Halifax regularly complains to OPD Psychiatry that we are giving too many antidepressant drugs to unreliable parents. It is a cardiologist's nightmare to treat children with overdosage of tricyclics.

Dr. Gray has made an interesting observation of the admitted cases. 35 of the 40 patients who were not dangerously ill had a significant blood alcohol level. In the

3 cases who were dangerously ill, there was no alcohol in the blood.

The relatively small number of suicides from overdosage is due to two reasons:

1) Many patients who are severely suicidal use more certain and violent methods.

2) It is very difficult to die by overdosage if one is taken to the Emergency Room while still alive. Less than 1% of cases admitted with overdosage die.

There were 34 callers to the 4 different Help Lines in the three months of the study, who called largely because of suicide ideas. Only 3 of these were considered to have serious suicide intent and arrangements were made for them to get help. Many of the remainder threatened to make a suicide attempt, but in the judgment of the volunteer workers they really wanted to talk to someone and were not seriously suicidal. It is clear that in the Halifax Metropolitan Area up to the present time, Help Lines are only very rarely being used by seriously suicidal patients. This is a common experience of Suicide Prevention telephone services.

SUMMARY AND CONCLUSIONS

1. It was impossible to collect complete and accurate data by the method used – questionnaires and examination of hospital records and coroners' reports. The results are only rough approximations.

2. The suicide rate in Metro Halifax was 15.8 per 100,000. The highest risk group were males aged 20 – 39.

3. Corrected rates were 368 suicide gestures, a rate of 142/100,000 and 336 suicide attempts, a rate of 129/100,000.

4. Only a very small percentage of seriously suicidal persons used Help Line Services.

5. The data suggest that most suicides are not, at the present time, preventable. □

Halifax Police Chief Talks To The Bulletin

Halifax Police Chief G. O. Robinson said he disagrees with the conditional licence concept, "But if government in its wisdom is going to grant conditional licences in certain instances, then they should cite on them the specific times and places for which the licences are valid."

In fact, public misunderstanding of the matter is fairly widespread. Currently, Nova Scotia does have a form of recognized conditional licence applying only to those who have lost ten or more driving points during a given period and who may seek a qualified suspension easement from a judge for income earning purposes. While it is also possible for a similar application to be made following a conviction for drunk driving under the federal Criminal Code, the province, which sets licensing standards, is not obliged to recognize a successful application.

Evidently, however, there has been a form of de facto recognition in the past because a conditional licence is hard to police.

This may have led to a move from the opposition side of the provincial Legislative Assembly during the late 1973 mini-session which would have allowed for provincial approval of conditional licences for certain motorists convicted of drunken driving. A six month hoist to the question, however, put the lid back on this version of Pandora's box.

Meanwhile, Chief Robinson has continued to reject the concern of the majority of road-users over the reduction of the mandatory suspension of one year for drunken driving to six months and stressed to the Bulletin, "We can lay a charge and will if we come across somebody with this kind of record holding a conditional licence."

But, he pointed out, there are considerable problems in enforcing the intent of any type of conditional licence. "One of our men may have cause to stop a motorist at around 11 o'clock at night. If this fellow has a conditional licence and is, for instance, in real estate, who's to say whether or not he's using his vehicle to earn his living at that moment? In cases like this, we have instructed our men to take all the necessary details and file them with the traffic division. Then we refer the matter to the Crown Prosecutor for his consideration."

Drunken driving, he said, is a crime. "If somebody drinks and drives, he knows the penalty is there. It's that simple."

The Chief also underlined that the duty of any police force is to serve the best interests of the public, both in enforcement of the law and in making recommendations to government.

The Chief has a point. The penalty is there. A refusal to recognize the hazard presented by the act – either on the part of the driver or on the part of the courts – does not serve the best public interest.

The argument that a person suspended for drunken driving may incur financial loss and may bring economic hardship on his family cannot be disputed. The same argument would apply to the unsuccessful holdup artist.

However, to what extent is the innocent motorist or his or her passengers protected if conditional licences may be obtained following a drunk driving conviction?

How about the economic hardships which may be inflicted on their families?

One can understand the problem facing the court when the case of a motorist who has lost ten or more points through, for want of a better word, "misadventure" is reviewed and a hitherto unblemished driving record of 20 years comes to light. Obviously, some consideration must be afforded this unfortunate's plight.

But the drunken driver has already demonstrated a lack of concern for himself and other road users. A conditional licence in his case is a gamble that he will suddenly see the light. The same applies to the motorist with a record of dangerous driving.

It's a gamble that somebody else is taking with your life. □

Bermuda Police Chief Talks To The Bulletin

Bermuda Police Commissioner "Nobby" Clark – a former Pictonian, by the way – says fines levied against traffic offenders don't mean a thing. "Down here when you fine somebody, say, $100 for a traffic offence, he'll just pull it out of his pocket and the odds are he'll have another several hundred in there anyway. No, our policy is to get them off the roads."

Island courts, he said, have taken a far more serious view of highway offences than other jurisdictions. "In fact," the Commissioner told the Bulletin, "they have been sending people to jail for first time speeding offences. They *have* to take a hard view of the situation when you consider the narrow winding roads we have here. Going at 20 to 25 mph over the set speed limit could result in a jail sentence of from two to four weeks. We've got people serving sentences right now for speeding offences."

A moving vehicle offence in Burmuda calls for a minimum 6 month licence disqualification which can be stretched to a two year maximum depending on the nature of the offence. Couple this with the very real possibility of a jail sentence and it's obvious that Bermudians and visitors have a very real incentive to obey the rules of the road.

The Commissioner pointed out that Bermuda does not have a conditional licence arrangement which would allow a convicted offender to still use a vehicle as an income earner. "What we do have is a system which will allow a convicted driver to apply for requalification half way through the disqualifying period. For instance, if a driver is serving the mandatory six months off the road, he can apply for requalification at the three month mark.

"I should also point out that while we do have a system of disqualification here, we also have a suspension procedure. It works something like this. It's possible that a first offender may simply have his licence suspended for two or three months – whatever the court decides. But if he has a record of previous offences – or perhaps even one offence – the court may disqualify him from driving, which means that to get his licence back he'll have to go through the whole testing procedure again."

Drunk drivers, he said, can find themselves in jail for six months with the maximum two-year disqualification as part of the court-imposed package punishment.

And Bermuda's police don't play favorites, either.

The Commissioner cited a recent case in which a government member sought police assistance in handling a traffic charge. "We told him, 'Sorry, you'll have to go to court like anybody else.'"

"You just don't play favorites when you're dealing with something as serious as speeding or dangerous driving."

With over 20,000 motor vehicles – a substantial number of them auto-cycles – packed into the island's 20.59 square miles and with a little less than 400 police officers and constables to handle all law enforcement, Commissioner Clark and the Bermuda courts have taken the view that driving privileges demand personal responsibility – and when responsibility is not shown, the hammer comes down hard. □

Continuous Lumbar Epidural Anaesthesia for Obstetrics

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The efficient managment of pain relief during labor which assures a safe outcome for both mother and child presents a real challenge to even the most experienced Anaesthetist. It is our purpose in this article to acquaint you with Epidural Anaesthesia, which we feel offers the maximum in comfort and safety for obstetrical patients which come under our care at the Halifax Infirmary.

It is only since the advent of modern anaesthetic techniques that the Obstetrician has been able to deal effectively with abnormal labor. Anaesthesia, along with anti-sepsis and antibiotics, has played a large part in reducing maternal and perinatal mortality. Nearly 130 years ago, in 1847 Sir James Young Simpson first used Chloroform to provide pain relief during childbirth. Even though many years have elapsed since that time, we are still faced with the challenge of providing comfort for the mother while not adversely affecting the infant. Modern concepts in Obstetrics advocate the frequent use of episiotomy, outlet forceps, forceps rotation and Caesarean Section. All of these procedures require effective and safe anaesthesia. The active participation of the Anaesthetist in the conduct of pain relief provides a safer and more understanding use of available techniques. As a result, over the past fifteen years Epidural Anaesthesia has been increasingly used throughout many of the major centres in Canada. The background information on Epidural Anaesthesia and its use in Obstetrics was best put forward in a classic article by Doctor P. R. Bromage of the Royal Victoria Hospital which was published in 1961.[1] Our technique of using Epidural Anaesthesia in Obstetrics is based on his original work.

Each member of our Anaesthetic staff gets caseroom experience at least once a week and over the long run we are probably exposed to an equal number of cases. The anaesthetist is called in at the request of the physician performing the delivery and, usually, after complications have arisen. The majority of deliveries are carried out under Pudendal Block Anaesthesia and although this is satisfactory for the delivery itself, it is often quite unsatisfactory for the control of pain during the first stage of labor. The number of deliveries and anaesthetics in our department remains relatively constant from year to year and the average number of deliveries each year has been approximately 2,500 and the average number of anaesthetics about 223. This means that approximately 11.2% of deliveries have required anaesthesia. At the present time Epidural Anaesthesia is used to provide anaesthesia in the majority of these deliveries. In all cases Epidural Anaesthesia is performed at the request of the physician in charge of the case. The majority of patients were primigravida who started to have painful, but ineffectual contractions. The main indication was an unusual amount of discomfort associated with slow progress in labor. Thus, it is not surprising that some of the cases ended in Caesarean Section which was performed after a trial of labor. The remainder of the cases were delivered vaginally either by the spontaneous efforts of the patient or by elective outlet forceps.

Some knowledge of the physiology of labor and the conduction of pain are basic to the understanding and the intelligent use of Epidural Analgesia and Anaesthesia during labor. The uterine contractions start bilaterally as synchronous waves in an area near the insertion of the Fallopian Tubes and they consist of longitudinal shortening and circular constriction of the muscle fibers. Lack of coordination of these waves of contraction makes labor painful and ineffective. Uterine contractions can start and progress in the absence of a nerve supply to the uterus. The exact role of the autonomic nervous system in the course of normal labor is incompletely understood, but it is known that ineffectual contractions can occur from sympathetic stimuli or the effect of circulating catecholamines. Specifically, adrenalin tends to depress the strength of contractions and tends to shorten the period between contractions thus increasing their frequency. There has not been any agreement on the exact cause of the pain due to uterine contractions, but one theory suggests that it may be due to acidosis which has resulted from the hypoxia caused by inadequate blood flow through the muscle during its contraction. Whatever the cause of the pain, during the first stage of labor it is transmitted by visceral afferents in the sympathetic chain and travels to the eleventh and twelfth thoracic segments of the spinal cord.

In the first stage of labor then, the pain is produced by intermittent rhythmic contractions of the lower uterine segment and by dilatation of the cervix. This pain can be relieved by blocking the visceral afferents of the eleventh and twelfth thoracic nerves. This can be done by paracervical nerve block or by paravertebral sympathetic nerve block or, much more effectively and practically, by epidural block.

The motor control of the uterus is independent of the sensory component and uterine contractions persist even

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though the pain is abolished. The main factor responsible for producing uterine contractions is the output of oxytocin by the posterior pituitary. The output of this hormone is increased by reflex factors such as stretching and dilatation of the cervix with pressure on the perineum and vagina. Although it has been postulated that uterine contractions are under the control of nerve pathways originating in the lower thoracic segments of the spinal cord, it has been shown that uterine contractions persist even in the presence of a spread of segmental analgesia to the level of T2.

Near the end of the first stage of labor as the presenting parts pushes down on the pelvic outlet, pain is referred through the lumbosacral plexus to the lower lumbar segments of the spinal cord. During the second stage pain is produced by stretching of the vagina and distension of the perineum. This pain is referred by somatic afferents to the second, third and fourth sacral nerve roots. Each patient has a different tolerance to pain and we are all aware of how pain can be modified by anxiety, fear, apprehension and emotional upset.

Therefore, most of the pain in the first stage of labor can be relieved by blocking the spinal segments T11 and T12. This can be done without greatly impairing the effectiveness of uterine contractions. In fact, in a patient who has incoordinate uterine contractions, an Epidural Block affecting T11 and T12 may restore the cyclic rhythm to normal and result in stronger and more effective contractions.

In addition to the involuntary expulsive powers which have been mentioned above we should bear in mind that the voluntary expulsive forces come into play during the second stage of labor. These voluntary powers require a functioning diaphragm and strong, active abdominal muscles.

The sacral roots should not be blocked prematurely in labor because this will impair the bearing down reflex and produce poor tone in the levator ani muscle. The proper flexion and rotation of the presenting part, in the cephalic presentation, is determined to a major degree, by the tone of the levator ani muscle. Thus, if the second, third and fourth sacral nerve segments are blocked too soon, a posterior position or transverse arrest is apt to result.

ANATOMY OF THE EPIDURAL SPACE

The epidural space is only a potential space, surrounding the spinal cord, which extends from the foramen magnum to the sacrococcygeal junction. The inner wall is the dura mater and the outer wall consists of the periosteum and the supportive ligaments of the vertebra, the most important of which is the ligamentum flavum. The space is filled with adipose tissue, lymph vessels, and venous and arterial plexuses. It is traversed by the spinal nerves. Laterally it communicates with the intervertebral foramina. The epidural space may be entered with a needle from either below (the caudal approach) or from above (the interspinous approach).

TECHNIQUE

The Lumbar Epidural Catheter may be inserted when labor is clearly established and when the degree of maternal distress makes it apparent that simpler methods of analgesia will not be adequate for the safe and humane conduct of the delivery. In primigravida the cervix should be dilated at least to four centimeters and in multipara at least to three centimeters. We prefer to use the continuous epidural technique in preference to the "single shot" method. The major advantage to using continuous Epidural Anaesthesia is to afford the mother excellent analgesia throughout the active and often exhausting first stage of labor. The insertion of the Epidural Catheter is generally performed in the case room with the patient lying on the stretcher. The patient is positioned on her left side with her back well over to the edge of the stretcher. The head is flexed downwards with the chin towards the chest and the knees are drawn upwards as far as possible towards her abdomen. This allows for more complete flexion of the lumbar spine and opens up the appropriate lumbar interspace. It is our custom to wash our hands thoroughly and to put on gloves for the procedure. The skin over the lumbar region is prepared with Tincture of Savlon.

A sterile drape is placed over the patient's upper side so that the iliac crest can be palpated. An imaginary line joining the two iliac crests should run through the L4-5 interspace or through the lower portion of the spine of the fourth lumbar vertebrae. From this landmark, the L2-3 interspace or the L3-4 interspace can be identified. Although Bromage[1] advocates the L2-3 interspace, it has been our custom to use the L3-4 interspace. Some 1½% Carbocaine is injected through a No. 25 needle to produce a skin wheal at the L3-4 interspace. A No. 16 Tuohy needle is passed through the skin wheal while the index finger and the thumb of the left hand delineate the interspace. The tip of the Tuohy needle is then passed through the skin, subcutaneous tissue, supraspinous ligament and is imbedded in the interspinous ligament. A five cc. syringe containing four ccs. of 1½% Carbocaine is attached to the hub of the needle. Gentle pressure is exerted on the plunger of the syringe as the needle and syringe are advanced towards the ligamentum flavum. This ligament is a tough, yellow, fibrous ligament which marks the outer boundary of the epidural space. When the tip of the Tuohy needle becomes imbedded in the ligamentum flavum, there is a marked resistance to pressure on the plunger of the syringe. This is so constant that it permits identification of the ligament which is so important to the success of this technique. Once the tip of the needle has been imbedded in the ligamentum flavum and the board-like resistance on the plunger of the syringe has been established, the needle and the syringe are advanced carefully while pressure is maintained on the plunger. As the tip of the needle enters the epidural space there is a sudden loss of the resistance to the forward pressure on the plunger and the solution flows easily into the epidural space. No attempt is made, at this point, to inject a large amount of anaesthetic solution although a small amount will help in lubricating the space. Most of the

anaesthetic solution remaining in the syringe is discharged into a beaker and an attempt is then made to inject air into the space. This should also be easily injected without any resistance. There should not be any back-flow of fluid out of the needle. If the subarachnoid space has been entered inadvertently, spinal fluid will spurt out of the 16 gauge needle. This should not occur if the technique has been performed carefully.

A sterile Teflon coated vinyl catheter is then inserted through the Tuohy needle. This catheter has five, one centimeter markings placed one needle length from the tip. It is our practice to insert the catheter through the needle so that it extends five centimeters beyond the tip. The bevel of the needle is directed so that the catheter goes up the epidural space. If the tip of the Tuohy needle is in the epidural space, the catheter can be easily inserted. Once the catheter has been inserted to a distance of five centimeters, the needle is then withdrawn over the catheter. Gentle traction is then exerted on the catheter to withdraw it slightly, about 1½% to 2 centimeters. This leaves approximately three centimeters in the epidural space. A two inch gauze square is then folded and is placed immediately above the puncture site and the catheter is folded in a cephalad direction over this sponge to avoid an abrupt right angle in the catheter which might cause it to kink. The remainder of the catheter is then placed over the patient's back so that the end is just above the patient's right or left shoulder. The catheter is taped in place using three inch wide adhesive. The patient is then turned immediately onto her back and a twenty cc. syringe containing 1½% Carbocaine is connected to the outer tip of the catheter using a needle type adaptor. Six ccs. of 1 ½% Carbocaine are then injected in a period of twenty seconds. The patient is placed on her back to assure an even distribution of the local anaesthetic agent on both sides of the epidural space.

The patient should begin to notice almost complete relief from the pain of uterine contractions within eight to ten minutes following the injection. If relief comes on immediately, this would suggest that an inadvertent spinal block has been produced. The initial injection should give a period of pain relief lasting from sixty to ninety minutes. All subsequent injections usually provide pain relief for only sixty minutes. All topping-up injections should be given as soon as the patient first begins to mind her contractions. If the effect of the anaesthetic agent is allowed to wear off the patient will be left without any form of analgesia and as a result will be extremely uncomfortable. This can be avoided if attention is paid to giving the topping-up injection of six ccs. of 1½% Carbocaine as soon as the patient begins to complain of the return of discomfort. In our experience, the pain of labor can be almost completely relieved by the initial injection of six ccs. of 1½% Carbocaine and by giving six ccs. of the same mixture when topping-up injections are required.

Immediately following the initial injection, an intravenous drip is set up using a No. 18 Medicut Cannula. Pitocin may be added to the intravenous drip of five percent glucose-water as required if stimulation of uterine contractions is indicated. Blood pressure readings are taken every five minutes for the first quarter hour. If no fall in blood pressure occurs during the period, a further fall is unlikely to occur during the course of the block.

The volume of the local anaesthetic agent injected can be modified according to the percentage concentration of the solution used. It is customary in our unit to use eight to ten ccs. of 1% solution or four ccs. of 2% solution or six ccs. of 1½% solution. The addition of Adrenalin 1:200,000 to the local anaesthetic solution will increase the intensity and the duration of the block. It also tends to reduce the amount of local anaesthetic agent which is absorbed into the epidural veins and thus reduces the likelihood of a systemic reaction to the local anaesthetic agent.

When the patient is ready for delivery she should be positioned in semi-sitting position and a dose of 12 to 15 ccs. of 1½% Carbocaine is injected slowly through the epidural catheter. In this position the anaesthetic solution runs down the epidural space into the sacral region to block the second, third and fourth sacral nerve roots and so produces an effect equivalent to bilateral Pudendal Block. It usually takes from fifteen to twenty minutes for the onset of a complete block in the perineal area. After this time, the patient can be delivered either by her own efforts or by outlet forceps without any discomfort. If there is a sudden need to perform a Caesarean Section some time during the course of labor, a larger dose of Carbocaine can then be injected through the catheter so that a block to the level of T4 is produced. Usually a dose from twenty to twenty-two ccs. of 1½% Carbocaine is sufficient to produce this degree of spread. The Caesarean Section can be commenced within twenty to twenty-five minutes following the injection through the epidural catheter.

OBSTETRICAL CONSIDERATIONS

The practice of Obstetrics is singular among Medical Specialties as it is really the only branch of medicine in which there are two patients. We must give individual consideration to the mother, as well as to the fetus in utero. It is only by individual consideration that a successful outcome may be obtained. We must realize that most women carry more than one pregnancy. If we are to eliminate the apprehension and fright from future labors, then the first pregnancy and labor should be carried out with the minimum of pain and discomfort for the mother. The labor itself should not be allowed to continue for such a long time that the mother cannot look forward to its end. Epidural analgesia and anaesthesia offers many advantages over natural childbirth and other methods of regional anaesthesia. It allows the mother to remain awake and to enjoy, with her husband, her labor and delivery.

ADVANTAGES

It is our feeling that epidural anaesthesia and analgesia offers many benefits to the mother and child, obstetrician and obstetrical staff.

A. Pain Relief

Epidural anaesthesia provides beneficial pain relief for the first, second and third stages of labor. By blocking nerve roots T11 and T12, the pain and discomfort of cervical dilatation can be eliminated. By elimination of sensory fibers of S2, 3, and 4, the pain of the second stage of labor with its vaginal dilatation and episiotomy can also be effectively eliminated. In the third stage of labor at which time the uterus again contracts, the cervix again dilates and the vagina is again extended, roots T11 and T12 and S2, 3, and 4 are effectively blocked. The result is a relatively painless labor for the patient. It is a labor that she will remember as relatively pain free. She will again look forward to this type of anaesthesia for delivery of her subsequent children.

The mother remains alert and cooperative during labor and the use of depressing analgesics is unnecessary. As a result the child is born undepressed by narcotic drugs and usually cries lustily at birth. Oxygen can be administered to the mother during the delivery and there is considerable evidence that this improves the Apgar score of the newborn child.[10]

B. Analgesia for Obstetrical Operations

Unfortunately all deliveries and labors are not straight forward. The various obstetrical operations can be better carried out with the patient well relaxed and pain free. The use of obstetrical forceps for outlet delivery, or for rotations in cases of abnormal position or presentation, and for the after coming head in breech presentation require adequate anaesthesia and patient relaxation. With adequate blockage of nerve roots S2, 3, and 4, forceps deliveries as well as extraction of a second twin can be readily undertaken. This blockage will also allow for repair of episiotomy or cervical lacerations. Uterine exploration as well as manual removal of the placenta, may also be carried out with a minimum of discomfort under epidural anaesthesia.

C. Prevention of Precipitous Delivery

Precipitous delivery, i.e. delivery before medical help is available may be dangerous to both mother and child. Lacerations of the birth canal may result from the bearing down of the multiparous patient even prior to full cervical dilatation. Annular tear of the cervix may also be obtained by this mechanism. The birth of the baby before medical help is obtained may lead to fetal hypoxia as well as temperature drops resulting in cold stress to the infant. Unfortunately, in our particular area there are many patients and doctors who live a considerable distance from hospital. Therefore, time is of the essence. Under epidural anaesthesia the pressure of the pelvic floor and the sensation of bearing down may be eliminated. The patient will not tend to push against an undilated cervix and precipitous deliveries are a relative rarity under epidural anaesthesia.

D. Alternatives to General Anaesthesia

In certain situations where it is felt that general anaesthesia is inadvisable epidural anaesthesia may be a good secondary choice. For example:

1. In the situation where a patient has recently ingested a meal, general anaesthesia is contra-indicated. Aspiration of gastric contents during general anaesthesia is still a major cause of maternal mortality.

2. During a prolonged general anaesthetic the fetal placental unit may become hypoxic. If, for example, prolonged surgery is necessary for a repeat Caesarean Section, or Caesarean Section is done by a person who is a particularly slow operator, fetal hypoxia may result. This may be eliminated by choosing epidural anaesthesia.

3. The uncooperative patient – the patient who is extremely agitated, offers the Obstetrician and nursing staff at times insurmountable problems. Sometimes patients are their own worst enemies, particularly in situations where fetal monitoring may be necessary. Epidural anaesthesia allows the patient to relax and this often makes uterine pressure and fetal heart rate tracings more meaningful. It is also much easier to nurse a patient who is relaxed and appreciating her labor than a patient who is particular agitated and aggressive.

4. A certain number of our patients have pre-existing systemic diseases. Today we are now recognizing more medical problems complicating obstetrics such as Diabetes Mellitus and certain acid base imbalances. A general anaesthetic with its necessary fasting and post-operative nausea may cause these metabolic imbalances to become a major problem in the post-operative period. As a result many of us now tend to deliver these patients under continuous epidural anaesthesia where the patient post-operatively is able to obey instructions. Many patients who have been delivered are kept during the post-operative period under epidural anaesthesia for immediate pain relief which to the patient recovering from a general anaesthetic may require narcotic control.

E. Medical Problems

There are certain medical problems other than those which have been mentioned previously which certain individuals take as indications for epidural anaesthesia.

1. *Hypertension and Toxemia* – The management of the mildly toxic patient, even though often taken for granted, is relatively striaght forward. However, the hypertensive patient who is resistent to conservative forms of medical management often presents a dilemma. A drug to control blood pressure may cross the placental barrier and potent agents such as Reserpine have been associated with fetal demise. In patients who are severely agitated, toxemia can be very difficult to control. By the use of an epidural anaesthetic by an experienced anaesthetist, the blood pressure often can be stabilized without the detrimental fetal hypoxia.

2. *Drug Addiction* – In today's more liberal society we are now seeing patients who are either drug addicts, or who have been cured of their drug addiction. It is unwise to give a recently cured individual a large amount of narcotic for pain relief. Often these patients have very low pain

thresholds and require extremely high amounts of narcotics to control their symptoms. This, of course, has a secondary fetal depressing effect. The actual drug addict may require a narcotic to control her withdrawal symptoms. However, often the amounts of narcotic required are extremely great. In these two situations continuous epidural anaesthesia and analgesia offer many benefits. Narcotic sedation is eliminated or reduced, the labor can be carefully monitored and the baby when delivered can be handed to the Neonatologist for careful observation.

F. Dystocia

Dystocia is the most common intrapartum problem that the Obstetrician has to deal with. More and more we are realizing that prolonged labors are without benefit to mother and child. As Caesarean Section rates are rising the perinatal mortality and intrapartum mortality are dropping. If in fact, our perinatal mortality rates and intrapartum mortality rates are on the decline, then we must be making headway in the diagnosis and management of Dystocia. In the management of these situations continuous epidural anaesthesia and analgesia may be of great advantage.

1. *Incoordinate Uterine Activity* (Hypertonic Inertia) – It is sometimes difficult to assess labor particularly in the primigravida. This particular type of patient is usually admitted to the hospital with painful contractions without progress beyond 4 cms. of cervical dilatation, or descent of the presenting part. This is often the patient who is neglected and we say to ourselves, "Is she in labor, or is she not in labor." This type of abnormal pattern is often seen in the case of an occipital posterior position with extension of the presenting part. The early treatment for this particular complication of labor is a sedative. However, if in fact the patient is at term, or near term and this abnormal uterine pattern returns after the sedative has worn off, then this patient has incoordinate uterine activity. It has been found that continuous epidural anaesthesia often eliminates this particular uterine pattern and regular uterine contractions, with progress in labor are established. Artifical rupture of the membranes also should be undertaken. In many of these cases the amniotic fluid is meconium stained and monitoring of the fetus is essential. Extremely low doses of Pitocin in the range of one to two milliunits per minute may be used along with the continuous epidural anaesthesia to produce an effective labor with progressive cervical dilatation and descent of the presenting part.

2. *Borderline Cephalo-pelvic disproportion* – In the primigravida or the multiparous patient who is laboring against borderline disproportion, often her labor is prolonged and particularly uncomfortable. This often brings about anxiety, apprehension and fits of crying which probably do more to unnerve the patient than anything else. It has been felt by some that the very nervous and apprehensive patient increases her circulating Catecholamines and these substances tend to produce an irregular and incoordinate type of uterine activity. Continuous epidural anaesthesia will often put a stop to the irregularity of contractions and will also make the patient's labor much more comfortable.

3. *Excessive Narcotic Utilization* – Unfortunately, there are still patients who have been allowed to labor indefinitely. One often finds that to settle this type of patient large doses of narcotics have been used. This may very well produce fetal depression and hypoxia at the time of birth. The excessive use of narcotic can be eliminated by use of continuous epidural anaesthesia.

DISADVANTAGES OF EPIDURAL ANAESTHESIA

A. Hypotension

1. *Supine Hypotensive Syndrome* – Because of the enlarged uterus laying on the inferior vena cava in the supine position in Gravida approaching term, the venous return is compromised as is the cardiac output. This produces a faintness with a resultant fall in blood pressure. This syndrome is called the Supine Hypotensive Syndrome. It can often be remedied by the use of oxygen and turning the patient on her left side, thus allowing the uterus to fall away from the inferior vena cava and permitting the venous return to assume normal levels. This Syndrome is fairly common and Crawford, et al,[6] has recommended that all patients in labor should be nursed on their sides. In his department all Caesarean Sections are performed with the patient in the oblique position to ensure that the uterus is not lying directly on the inferior vena cava. A foam wedge is placed under the patient's right side to maintain the oblique position during the operative delivery. They have determined that this practice has been very influential in improving the Apgar scoring of infants born in this manner.

2. *Hypotension Secondary to Peripheral Vascular Dilatation* – With the removal of sympathetic tone and peripheral pooling, hypotension may occur as a result of decreased venous return. This may be seen in patients who have had excessive doses of narcotics in the first stage of labor, in patients with toxemia of pregnancy and in those patients with cardiac disease and a fixed cardiac output. The Anaesthetist should be equipped to elevate the blood pressure if the systolic blook pressure falls below 100 mm. Hg. or if the blood pressure drops greater than 30% below the pre-anaesthetic levels. When the systolic blood pressure falls below 80 mm. of Hg. fetal heart rate abnormalities may be noted. This is because of hypoxia of the fetal placental unit. During uterine contractions, particularly towards the end of the first stage of labor, the intra-amniotic pressure may rise to 70 mm. of Hg. If, the systolic blood pressure is at this level or slightly higher or lower, there is a reduction in uterine blood flow and this results in hypoxia of the fetal placental unit.

3. *Hypotension During Surgical Manipulation* – One must keep an eye on the blood pressure at all times when she is receiving a continuous or "one shot" epidural anaesthetic, particularly if this anaesthetic is used for surgical manipulation. During forceps delivery or manual removal of the placenta there may very well be stimulation of Frankenhauser's plexus. If hypotension does become a problem then vasopressors should be used in order to return the blood pressure to relatively normal values. Oxygen should also be administered at this time as relative hypoxia usually occurs.

4. *Tranquilizers* – In patients receiving Chlorpromazine or Reserpine sudden drops in maternal blood pressure have been noted. The sympathetic nervous system is blocked by epidural anaesthesia. Often these tranquilizers may act as ganglionic blockers. This combination may produce sudden drops in blood pressure.

5. *Post Partum Hypotension* – During epidural anaesthesia the patient should be receiving an intravenous infusion. Oxygen may also be used. In patients receiving continuous epidural anaesthesia post partum hypotension may occur. This may be due to discontinuation of the intravenous prior to return of sympathetic tone. In such circumstances postural changes such as putting the patients legs down from the lithotomy position will allow peripheral pooling and a resultant hypotension.

A. Urinary Retention

Moore and Greenhill[4] have stated that urinary retention after epidural anaesthesia is common. It should be remembered that many patients are receiving this type of anaesthesia because of some abnormality in their labor. Bladder trauma from delivery, or from the use of forceps may also be part of the underlying problem.

B. Toxicity of Local Anaesthetics

In some individuals who have toxic reactions to local anaesthetics, convulsions may be seen. However, convulsions during labor or delivery particularly in the light of hypertension must be considered due to eclampsia. There are many patients who have a low convulsive threshold, and in these patients the electrolyte imbalance occuring during labor and delivery may very well result in seizure activity. This may be seen particularly in patients who have had water intoxication due to the use of dilute oxytocin infusion for dystocia.

The injection of a local anaesthetic anywhere in the body carries with it the remote risk of a relative overdose from the accidental injection into a vein, or rapid vascular absorption from the tissues. If high blood levels of the local anaesthetic agent result from this rapid absorption, symptoms related to the toxic action of the agent will appear. Drowsiness is usually the first symptom to appear. This is followed by the onset of irritability, mental confusion and muscular twitching. These symptoms will not appear unless a massive overdose of the local anaesthetic solution is administered. The addition of 1:200,000 Adrenalin to the local anaesthetic used for epidural anaesthesia, will minimize the vascular absorption of the agent and thus reduce the likelihood of a systemic reaction.

C. Inadvertent Spinal Anaesthesia

An inadvertent subarachnoid tap may occur at the time of induction of epidural anaesthesia. This will result in an out pouring of spinal fluid through the No. 16 Tuohy needle. This should be readily recognized and no attempt should be made to inject local anaesthetic solution into the subarachnoid space under these circumstances. If a local anaesthetic agent is injected the resulting spinal anaesthesia will produce paralysis, respiratory arrest, hypotension and cardiac arrest. Because of these most severe complications, anaesthetic help must be available and the case rooms must be equipped with oxygen and anaesthetic machines for respiratory assistance.

Of a more minor nature is the spinal headache which results from the leak of spinal fluid through a large hole in the dura. This headache which is quite resistant to the usual therapeutic measures may last for several days and it may be likened to an "albatross hanging about the Obstetrician's neck." The severity of the headache can be reduced by the infusion of normal saline into the epidural space. This will maintain a slight positive pressure within the space and prevent an out-pouring, or leak of spinal fluid. Good hydration should be maintained by the use of intravenous fluids during the next forty-eight hours.

D. Dystocia

Unfortunately, if used too early continuous epidural anaesthesia may very well slow or stop labor. If in fact labor stops one must wonder if, in fact, the patient was in labor in the first place. Hypotonic inertia can be readily solved with oxytocin stimulation of the uterus. The patient who fails to progress under epidural anaesthesia should be reassessed in the light of this particular complication. We also realize that during the second stage because of the lack of perineal and pelvic floor reflexes the bearing down and expulsive powers may be weakened. Abnormalities of position requiring flexion of the head and further rotation produce a failure to progress beyond the mid pelvis. Thus the use of forceps is increased. In many centers using this form of anaesthesia 80 to 90 percent of patients are delivered with forceps.

E. Neurological Sequelae

Paraesthesia and paralysis may result as a consequence of epidural anaesthesia; however, not all paraesthesias post partum should be blamed on this type of anaesthetic as abnormalities of rotation, forceps delivery, etc., may produce temporary changes in sensation. In reviewing the recent literature on this subject there are no reports of neurological complications following the use of epidural anaesthesia.

F. Sepsis

Although Sepsis is often listed as a complication of epidural anaesthesia, we are not aware of any reports that would indicate an infection either systemically or in the epidural space has resulted from the use of epidural anaesthesia. There were no infections as a result of our series at the Halifax Infirmary. It is our practice to wash our hands for five minutes prior to beginning an epidural and we put on gloves to perform the epidural tap. The skin over the lumbar region is always prepped with Tincture of Savlon prior to the induction.

CONTRA INDICATIONS

1. *The Unmanagable Patient* – This is the patient who is altogether uncontrollable at the time of delivery and probably general anaesthesia is better for this particular patient.

2. *Neurological Diseases* – Individuals having neurological diseases such as Von Recklinghausen's Disease, or a spinal abnormality should not be considered for epidural anaesthesia.

3. *Lack of Proper Anaesthesia Equipment to deal with Complications* – There are many centers in which the Obstetrician acts as both the Anaesthetist and Obstetrician. This type of anaesthesia should not be undertaken in a situation in which proper anaesthetic and resuscitation equipment do not exist. In the wrong hands this may be a very dangerous type of anaesthetic particularly if inadvertent spinal tap occurs.

4. *Sensitivity to Local Anaesthetics* – If a patient has a known sensitivity to local anaesthetic then they are contra-indicated. This is particularly so if these anaesthetic drugs produce a localized reaction which could produce a chemical meningitis with resultant neurological loss.

5. *Staphylococcal Lesions of the Back* – Any type of infectious process involving the skin of the back or the puncture site of the epidural needle should be used as a contra-indication.

6. *Fetal Hypoxia and Fetal Distress* – Fetal Hypoxia or fetal distress at full dilatation with the presenting part on the perineum if accessible to forceps necessitates immediate delivery and for this the most rapid form of anaesthesia possible is indicated. General anaesthesia is generally prefered under these emergency conditions. Some authorities suggest that toxemia of pregnancy may be a contra-indication. This is, of course, in the light of the hypotension which may be seen with this form of anaesthesia. If in fact the toxic patient has borderline perfusion of the fetal placental unit, hypotension may result in fetal hypoxia. In the more severe forms, however, which are uncontrollable, epidural anaesthesia is actually indicated if a skilled Anaesthetist is present.

7. *Patients on Chlorpromazine or Ganglionic Blocking Agents* – Many authorities have not found that major tranquilizers offer any contra-indication to the use of epidural anaesthesia and often some patients with psychiatric abnormalities require anaesthesia more than the average patient. Our recommendation, in this situation, would be to use epidural anaesthesia with great care.

SUMMARY

Constant vigilance and a high degree of skill are required to assure the safe management of pain in labor and the safe administration of all anaesthetics for the correction of obstetrical problems. Although epidural anaesthesia is relatively easy to master, it does require a degree of skill and judgment which is unlikely to be obtained without special training and experience.

The attributes of an ideal obstetrical anaesthetic are as follows:

1. It should provide pain relief for the mother.

2. There should be a lack of depression in the fetus so that spontaneous respiration occurs at birth.

3. There should be no interference in the normal course of labor, that is, uterine contractions should not be depressed by the methods of anaesthesia employed.

4. There should be freedom from any risk or hazard to the mother.

5. The cooperation of the mother should be retained so that she can assist in the delivery by using her voluntary expulsive powers. Ideally, she should be fully conscious to permit her full participation in the birth process.

It is our opinion that epidural anaesthesia best meets these ideal requirements for obstetrical analgesia and anaesthesia. The high degree of safety inherent in the use of continuous epidural analgesia in obstetrics is supported by the work of Hellman.[8] In his report on over 26,000 administrations of continuous epidural anaesthesia in obstetrical patients there were no irreversible complications. □

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Newer Thoughts on the Management of Myocardial Infarction

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The management of ischemic heart disease has made dramatic strides over the past several years. Eye-catching headlines in both the medical and lay press have been primarily involved with the elaborate biomedical electronic instrumentation of coronary care units, and the newer approaches to surgical revascularization of the myocardium. Drug therapy has been in a constant state of flux, newer developments including the addition of the beta blocking drugs (propanalol) to the therapeutic armamentarium and the increasing evidence against any major therapeutic value to the oral "long acting nitrates."

Less dramatic in its initial outward appearance, but even more important from the point of restoring the patient to the community, has been the change in the activity and rehabilitation of the patient with acute myocardial infarction. Several large centres in the United States have had early intervention programs in operation for several years, and recent reports in the literature[1,2,3] indicate that early mobilization in myocardial infarction is beneficial not only on a hemodynamic and psychologic basis, but as well, returns the patient to a position as an active member of society sooner than the "standard approach."

The acute management of myocardial infarction has been recently reviewed elsewhere,[4] but to briefly recapitulate, the patient with a major acute ischemic event is initially treated with bed rest, adequate analgesic relief of pain, mild tranquillization, and oxygen. If equipment is available, they should be constantly monitored with prompt therapy of arrhythmias. Ventricular ectopic arrythmias are best treated with intravenous lidocaine, (Xylocaine), given first in a bolus of 50 mgm and then blood levels maintained by a drip infusion of between two to four mgm per minute.

Levels less than 2 mgm per minute are usually not therapeutic, and levels of 5 mgm per minute or greater are associated with an increased incidence of toxic side effects.[5] Seizures, the most common manifestation of lidocaine excess respond promptly to discontinuation of the infusion. Lidocaine is rapidly metabolized by the liver and has a serum half life of approximately fifteen minutes (therefore the importance of giving a bolus to initiate therapy or to increase serum concentrations, as without an initial bolus, it takes approximately seven hours to reach therapeutic levels or new kinetic equilibrium). If the ventricular ectopic activity does not respond to adequate doses of lidocaine, then procainamide (Pronestyl) would be the next drug of choice.

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Ventricular tachycardia and ventricular fibrillation may develop de novo or may be preceded by ventricular ectopic beats. The VEB's that may result in ventricular tachycardia or fibrillation are those that are multifocal, occur in groups, or fall on the T wave of the preceding sinus beat. Ventricular tachycardia may respond to a bolus of lidocaine, or even to a sharp blow to the precordium, but these first two maneouvres should be performed while the defibrillator is being warmed up, and if of no effect, dc cardioversion should be carried out immediately. Ventricular fibrillation almost always requires immediate dc countershock. Following the restoration of sinus rhythm, the patient should be maintained on therapeutic levels of lidocaine for twenty four to forty eight hours. Following this, they should probably be maintained on an oral antiarrhythmic drug for several months, although there is no firm data to support this.

Bradyarrhythmias are frequently associated with acute myocardial infarction especially in the presence of inferior myocardial infarction. They are related to excess vagal discharge secondary to pain and nausea, and as well, to ischemia of the SA and AV nodes. Sinus bradycardia without evidence of decreased cardiac output need not be treated. If treatment is required, most cases respond to intravenous atropine (0.6 mgm I.V. and repeat if necessary q.5 minutes to a total dose of 1.8 mgm).

Some of the newer thoughts with regard to the management of higher degrees of AV transport disorders with myocardial infarction include the increasing realization that second degree heart block in the presence of inferior myocardial infarction usually will respond to intravenous atropine and does not require a transvenous temporary pacing catheter. AV conduction disturbances in the presence of anterior wall myocardial infarction however should be treated with a pacemaker as they represent wide spread destruction of the conducting system. It has also been shown recently that the development of right bundle branch block in the presence of acute anterior myocardial infarction has a high risk for complete heart block, and a prophylactic temporary pacing catheter is indicated.

Left ventricular failure is treated initially with a rapid acting diuretic such as furosemide (Lasix), and if the response to diuretics is inadequate, the patient should be digitalized. As the ischemic myocardium is more sensitive to digitalis, slightly less than the usual initial digitalizing dose of 1 to 1.5 mgm of digoxin[6] should be given. Studies with radioactive digitalis preparations and with external measurements of cardiac function show that oubaine is neither more rapidly acting than digoxin, nor does it have

the extremely short span of action as was once thought. The half life of oubaine is 22 hours as compared to 36 hours for digoxin, and is therefore no advantage to the use of oubaine.

The rehabilitation of the patient with an acute myocardial infarction begins as soon as the patient is free of major arrhythmia, left ventricular failure, and pain. Prolonged bed rest has a depressing effect on cardiac function, and can lead to extremes of physical deconditioning. The physically deconditioned patient requires a much greater oxygen consumption to perform the same work as a patient who is not physically deconditioned. As well, postural hypotension develops in any individual who remains on bed rest for more than several days. The patient is therefore better off if some activity is begun early in the course of the illness.

The bed pan fortunately, is disappearing from most coronary care units. The number of "bedpan deaths" is unkown, but certainly there is no question that straining on an uncomfortable bedpan produces decreased coronary blood flow secondary to the Valsalva maneouvre, and should be avoided. The measured energy cost of using a bedside commode is approximately 3.6 calories per minutes as compared to 4.7 calories per minute for using a bedpan.[7]

Sitting upright, as well, does not require very much more in the way of energy cost than does lying supine. Also, if the patient can be adequately monitored in a bed, there should be no reason why he cannot be monitored while sitting in a chair next to the bed. Naturally, the patient should be assisted in and out of the bed, and the chair that he sits in should be a well upholstered comfortable chair, with a foot stool. The program at the Victoria General Hospital allows the patient up in the chair for one half hour twice a day once the problems of failure, pain, and arrhythmia have been settled.

Those of us who have been bed patients for any length of time, can remember the difficulty and the amount of work involved in the daily activities of the bed patient. For those of you who have not had this pleasure of hospitalization, may I suggest attempting to give yourself a partial or complete bed bath while attempting to remain supine. This will point out the importance of avoiding the work involved with use of the anti-gravity muscles while in bed. Once the patient begins to sit up in a chair, and can tolerate this, it is probably best to perform almost all of the activities while upright. Certainly extremes of activities such as hair brushing should be avoided initially, but mild active bed exercise such as extension and flexion of the arms, shoulders and ankles should be encouraged. As well, the personal hygiene that the patient performs in bed with regard to shaving, face washing etc. should be done with the head of the bed elevated at least to forty-five degrees.

With the patient getting out of bed, and tolerating it well, then it would be reasonable to allow him to be up in a chair for as long as he is comfortable and not complaining of undue fatigue. He should be allowed up in a chair for all meals, and should begin spending more time in the chair than in bed. With the patient up in a chair from early in the hospital course, the concept of "dangling" hopefully will pass into history. Any bed patient when they are first gotten up, should sit on the side of the bed for a minute or two to "get their equilibrium," but the concept of prolonged "dangling" which is associated with dependancy of the lower legs and compression of venous return by the edge of the bed, should be avoided.

The next level would be that of bathroom privileges. This would include the patient being allowed to walk from the chair to the bathroom and return. Naturally, the first times that a patient is on his feet, he should be assisted back and forth in the event that he does become faint. The patient is then allowed activity as tolerated in the room and for the first time would be allowed to stand at the sink to shave, comb his hair, etc. Short walks in the hall with progressive lengthening of the distance walked and the rate of walking comes next, and by the time of discharge, the patient should be fully ambulatory on the ward.

Some centres that have an active cardiac rehabilitation team, supplement the daily activity of the patient with both passive and active warm-up exercises. This includes as well, walking up and down a flight of stairs immediately prior to discharge.

The in-hospital rehabilitation program at the Victoria General Hospital is monitored by having the patients assessed daily by the physicians and nurses involved in the care of the patient. All patients have an apical rate response and blood pressure reading determined with the initiation of each new level of activity, and an inappropriately high rate response, or a drop in blood pressure, indicated that the level of activity is excessive and the patient should not be performing at that level.

This information is obtained by the nurse during the day, and is transmitted to the house staff. The program that we have instituted at the Victoria General Hospital consists of six levels of activity from coronary care to full ambulation. The average uncomplicated myocardial infarction remains in hospital for approximately sixteen days. While the set levels have been established, the rehabilitation of the patient following an infarction will, of course, need to be planned on an individual basis, and there will be marked patient to patient variation in how rapidly they progress. The following is a chart of the suggested guidelines for an uncomplicated myocardial infarction.

Level 1 – 3 days
Level 2 – 2 days
Level 3 – 4 days
Level 4 – 2 days
Level 5 – 2 days
Level 6 – 3 days, with discharge on the fourth day of level six.

Level 1 – Acute coronary care: Bed rest with commode privileges. Self feeding, with all meats cut for the patient. Partial personal hygiene in that male patients would be allowed to shave

themselves and all patients would be allowed to wash their hands and face. All in-bed activities with regard to personal hygiene and meals, should be done with the head of the bed elevated to at least 45 degress. Hair brushing by female patients should be avoided. Mild, active bed exercise such as extension and flexion of the arms and shoulders should be encouraged, along with ankle exercises.

Level 2 – Out of bed for short periods of time. The patient is assisted on to a soft easy chair which is situated next to the bed and allowed to stay up for thirty minutes with the feet elevated. Following the period of chair rest, the patient is assisted back into bed.

Level 3 – Increasing chair rest, and the patient should be permitted to remain up on a chair for as long as he is comfortable, and not complaining of excessive fatigue. He should at this time be up in a chair for all meals, and be spending more time in the chair than in the bed.

Level 3 – Personal hygiene such as washing etc. should be performed while up in the chair rather than at bed rest.

Level 4 – Bathroom privileges. The patient would be allowed to walk from the chair to the bathroom and return.

Level 5 – Activity as tolerated in the room. The patient would be fully active in the room and for the first time, be allowed to stand at the sink to shave, comb hair, etc.

Level 6 – Shorts walks in the hall with a progressive lengthening of the distance walked and the rate of walking. By the time of discharge the patient should be fully ambulatory on the ward and able to walk several hall lengths.

The overall treatment of acute myocardial infarction has changed dramatically in the past twenty years. Not only from the development of cardiac monitoring and prompt recognition and treatment of arrhythmias, but also from the point of view of rehabilitation. In the second edition (1956) of *Paul Wood's Diseases of the Heart and Circulation,*[8] it is recommended that patients be confined to bed and remain there for three to six weeks or longer.[3] The reports in the literature over the past two years with regard to a comparison of two to three weeks hospital stay for acute myocardial infarction is as radical a departure from the "classic management" of fifteen years ago, as the supersonic jet is to the biplane. The concept of in-hospital rehabilitation, early intervention, and early discharge, do not appear to increase the morbidity or mortality from myocardial infarction,[4,5] and have the definite advantage of decreasing hospital stay and with it, the heavy demands on hospital beds. As well, it means an earlier return to work for the patient, and certainly, an improved psychologic adjustment to his disease. □

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ADVERTISERS' INDEX

NATIONAL HEALTH CARE EVALUATION SEMINAR

Faculty of Medicine, Dalhousie University

Halifax, Nova Scotia
June 10-14, 1974

OBJECTIVES: To assist people involved in health care delivery and research to develop an understanding of methods and techniques required for demonstrating and evaluating health-care projects.

PARTICIPANTS: Health professionals, administrators, and others, from all health fields, concerned with evaluating health-care.

EXPENSES: Tuition is $100. Lodgings will be arranged at the University for $5.00/day. Limited financial support is available.

For information and application forms, write to:
Mrs. Marilyn Janigan (Program Co-ordinator),
Department of Preventive Medicine, Faculty of Medicine,
Dalhousie University, Halifax, Nova Scotia.

Deadline for application: May 1, 1974.

This seminar is supported by a grant from the Department of National Health and Welfare.

The Roarin' Game

"Curling—Why and How it is Played" is the sub-title of an article recently published in the provincial press. It is worth reading by all curlers. As the Bulletin is ostensibly a medical journal, we can only furnish space for a short reference to the subject. As the game requires correct vision and careful judgment most members of our profession, after a short probation as leads and second stones, become mates and skips, we will quote for their benefit only the section of the article telling about the skip and the part he is expected to play in the game. In omitting the reference to the mate it is because "he is the brains of the rink and should be a skip." In giving space to this subject we have in mind members of the profession from Sydney to Yarmouth, for the "curling" doctor is ubiquitous as the "golfing" one, there is the difference in season only. The only other difference is that the curler plays and talks all winter while the golfer plays all summer and fall and talks all the year. But this is for the present medical skips and for those who think they should be skips.

"The Skip—is the goat. He is the gentlemen sportsman who neglects his business and sacrifices his valuable time because three others wish the benefit of his skill and experience. He doesn't sweep—that is for lesser lights. He holds the broom—and his temper—while his subordinates miss. He must be experienced and exercise good judgment in making decisions—nor must he blush or appear embarrassed when he hears other members of his rink discussing his failures and shortcomings with unfeeling spectators. He must not pick the right shot—this would forestall the experts behind the glass. Rocks that he can only see by whiskers, he must knock out. He must draw to the button, be the port but inches wide or more or none at all. He must be able to play dynamite or runner weight with one rock, and draw with the next. He must be able to take out four rocks when but three are there, and lay on the button. If he wins—it's his packed rink. If he loses—he's a tramp. Should he accidentally pilot his rink to a prize in the 'spiel—he won't have a friend in the world. Pity the poor skip!" □

THE MEDICAL SOCIETY OF NOVA SCOTIA

PROCEEDINGS OF

9th MEETING OF COUNCIL (1973)

AND

120th ANNUAL MEETING

The 9th Meeting of Council began as the Medical Society Officers attired in academic gowns and accompanied by Dr. J. D. Wallace, Secretary General of The Canadian Medical Association, representing Dr. P. J. Banks, President, paraded through the Medical Exhibit Lounge and Council Chambers to the head table. Following call to order of Council by Dr. P. B. Jardine, Chairman, the Officers were introduced to Council and Dr. Wallace brought greetings from the Canadian Medical Association. He noted that Dr. Banks' arrival was delayed because of a speaking engagement in San Francisco. Dr. Wallace wished the Council well in its deliberations and indicated he and Dr. Banks would be available to participate in the meeting to whatever extent was desired by the Society.

Dr. Jardine welcomed the Exhibitors noting that the Society recognizes their contribution to its Annual Convention. He encouraged Council members to take every opportunity to visit the displays and discuss the products with the exhibitors' representatives. Dr. Jardine extended the Society's invitation to exhibit representatives to attend the Friday luncheon and the President's Banquet and Ball.

Council business began as Dr. R. F. Hand, Chairman, Medical Archives Committee, read the names of Society members deceased during November 25, 1972 through November 10, 1973 as follows:

Dr. David Drury, Amherst; Dr. Patrick S. Gardner, North Sydney; Dr. Alexander C. Gouthro, Bras d'Or; Dr. J. O. Hunter, Yarmouth; Dr. Aksel Laretei, Kentville; Dr. John G. B. Lynch, Sydney; Dr. Donald F. MacInnis, Shubenacadie; Dr. Joseph A. McDonald, Glace Bay; Dr. John R. Macneil, Glace Bay; Dr. Allan R. Morton, Halifax; and Dr. V. H. T. Parker, Stellarton. Council observed a period of silence in tribute to the memory of these members.

New membership applications totalling 81 were approved by Council.

The Transactions of the 8th Meeting of Council and the 119th Annual Meeting 1972 as printed in the February 1973 issue of the Nova Scotia Medical Bulletin were approved.

Archives Committee Report – Dr. R. F. Hand reported that during the past year considerable progress had been made in improving facilities for caring for medical archival material. He expressed his committee's special thanks to the Faculty of Medicine for its contribution in this regard. Council approved continuing financial support for the employment of medical students in sorting and cataloguing archive material during the summer of 1974. Dr. Hand reported that the committee, following Council direction, had worked during the past year on the design of a Society Mace. He noted that the design illustrates the history of medicine in Nova Scotia and that all materials used in its construction would be native to this Province. A detailed description of the Mace is held at the Society Office for those interested. It also appears in the 1973 Reports to Council page 84. The cost of the Mace, projected at some $10,000, generated some discussion. It was ultimately directed that the Finance Committee and the Executive Committee give consideration to the cost aspects and report to Council in 1974.

By-Laws Committee – Dr. P. D. Jackson submitted two amendments to the Medical Society By-Laws which would (a) require Sections to report to the Annual Meeting of Council; and (b) dissolve the Inverness-Victoria Medical Society. Both were approved.

Cancer Committee – Dr. R. M. Cunningham, reporting for his committee, noted that in British Columbia where no tobacco advertising is allowed there is a marked reduction in smoking. Commenting on the problem of cancer follow-up in Nova Scotia, he said all doctors may be assured that the Nova Scotia Tumor Registry is working efficiently and all cancer patients are registered with them. He encouraged family doctors to increase the extent of their follow-up and report to the central clinic. His committee also suggested that the Division of Continuing Medical Education should put more effort into upgrading the level of knowledge of practitioners in Nova Scotia with respect to current treatment and management of malignant disease. In conclusion, he expressed concern with the quality of radiation therapy equipment available in Nova Scotia at this time.

Discipline Committee – Dr. J. A. Myrden reported that his committee had not been required to deal with any disciplinary matters during the year. He noted that discipline of the profession is a matter for the Provincial Medical Board. During the year, the Society on receiving complaints which had indications of a disciplinary problem forwarded them to the Provincial Medical Board for action.

Mediation Committee – Dr. J. A. Myrden reported that the volume of complaints continues at a high level and in the main are related to physician/patient relationships. These take a variety of forms, examples of which he quoted were refusal by physicians to arrange for proper referral, failure of physicians to provide patient information to doctors to whom a patient has transferred, abusive language by physicians and rudeness in dealing with patients. Dr. Myrden described the method of dealing with these complaints and the extent to which it involved Branch Presidents. Dr. Myrden expressed the view that with increasing demands placed upon physicians there is little likelihood that the level of friction will decrease. He urged physicians to give constant and continuing consideration to the matter of doctor/patient relationships and do their best to maintain these at the highest possible level. In closing, Dr. Myrden asked all members to give special consideration to completion of certificates of illness. He noted that instances had occurred where physicians had completed these forms without actually having seen the patient. He recommended that this should not be done and that the forms should not be completed for periods of illness five days or fewer.

Finance Committee – Dr. D. B. O'Brien provided Council with a detailed briefing on the auditors' annual report. He also presented the operating budget for fiscal 1974, noting that the forecast surplus will be down somewhat from fiscal 1973 due primarily to increases in staff salaries and continuing escalation of operating costs.

He reported that from time to time informal consideration is given by the Officers to the contributions of a limited number of Society members. All members of the Executive devote not less than 12 days per year to Society work, the Officers an additional 20 days and the President a further 20 days. This represents considerable personal loss and in some instances reduction in practice. It has been suggested that the Society give serious consideration to introducing an honorarium system. He then recommended that the Medical Society of Nova Scotia introduce a modest honorarium system to take effect at the beginning of fiscal year 1975, i.e. October 1, 1974, the allowances being as follows:

(a) President	– day 6 on	– $50/day = 45 days @ r =	$2,250.00
(b) Society Officers	– day 6 on	– $50/day = 25 days @ r =	7,500.00
(c) Execu. Committee Voting Members	– day 6 on	– $50/day = 6 days @ r =	5,100.00
			$14,850.00

Dr. O'Brien went on to note that approval of the honorarium system and recognition of increasing costs of operation in 1975 would necessitate dues increases of $15.00 and $5.00 respectively for a total of $20.00 per regular member. Council approved the operating budget for fiscal 1974, the introduction of an honorarium system as set out above for fiscal 1975, and a membership dues increase of $20.00 per regular member for fiscal 1975.

Council expressed its appreciation to Dr. O'Brien for the excellent manner in which he had performed the duties of treasurer during the past year and in particular his most comprehensive report to Council.

Drug & Alcohol Abuse Committee – Dr. E. A. Smith reported that during the year his committee has met frequently with other members of the Society as well as other organizations dealing with the problem of drug and alcohol control, including the Nova Scotia Commission on Drug Dependency, Nova Scotia Pharmaceutical Society, and Department of National Health and Welfare. Expressing the view that alcohol abuse is number one priority in this field, he recommended that a real attempt be made to treat alcoholics in general hospitals on a limited basis for detoxification and short treatment programs, then be referred to A.A. or other appropriate agencies for follow-up. This was approved, as was a recommendation that the teaching of medical students and family practitioners in the treatment of alcoholism be stepped up through a continuing series of educational programs through Dalhousie University organizations.

The subject of prescribing psychotropic drugs was discussed at length. Definitive guidelines suggested by the committee were discussed but not adopted as being the appropriate way to deal with the problem. A recommendation that increased emphasis in medical school training regarding the proper use of psychotropic drugs was approved.

Editorial Board Committee – Dr. A. J. Buhr stated that his committee endeavours to plan and produce a publication concerned with "medical communication, enhancement of unity with the Medical Society, and development of a satisfactory relationship between physicians in the community". Council indicated its belief that his committee is achieving its stated role by passing two resolutions reading "That copies of the Bulletin be available to patients in doctors' waiting rooms in order to promote better communications with the public", and "That if the present format of the Bulletin is acceptable to members of the Society the continued cost of production be underwritten".

Ethics Committee – Dr. C. H. Graham reported that his committee had considered the ethical aspects of physicians accepting as gifts prescription pads from drug stores or drug companies. His committee recommendation that it was unethical for physicians to do so was defeated. It was subsequently moved that whereas there is an uneasiness felt by many physicians in using gift prescription pads whether from drug companies or local pharmacies and whereas reasonably priced prescription pads of an acceptable nature are not always readily available, be it resolved that the Medical Society of Nova Scotia provide a service to its members whereby personalized prescription pads may be ordered through a printing house under an agreement arranged by the Society.

Dr. Graham indicated his committee's concern during the past year with the matter of physicians advertising when opening or changing their place of practice. It was approved that guidelines relative to this matter be issued annually in the Nova Scotia Medical Bulletin.

Referring to a Nova Scotia Bill relating to Control and Storage of Personal Information by Consumer Reporting Agencies, Dr. Graham reported that his committee had been involved in seeking amendments to this which would provide for maintaining the confidentiality of physician patient information. His recommendation that continued concern with this be maintained was approved.

Council 1972 referred a resolution "That it be considered unethical for any practicing physician to have a vested interest in ownership or management in any pharmacy within 20 miles of his normal place of practice" to the Ethics Committee for study and report. Dr. Graham reported his committee was unable to adequately define "vested interest" and develop yardsticks for its application; as well his committee believed that such a resolution would violate the rights of a physician to engage in business in addition to his practice of medicine. It was ultimately resolved that it be considered unethical for any practicing physician to manage any pharmacy within 20 miles of his normal place of practice.

Council 1972 referred a motion "That the Medical Society of Nova Scotia declare it to be unethical for any physician to be involved in the provision of primary medical care to patients resident in a rest home or nursing home facility in which the physician has a vested financial interest" to the Ethics Committee for study and report. Dr. Graham reported that there is a dire need for nursing facilities in Nova Scotia and in many instances this appears to be provided in an excellent fashion by concerned physicians. Also, information available indicated that residents of chronic care nursing homes are permitted the physician of their choice. Again the view was expressed that such a resolution would violate the rights of a physician to enter into business additional to his practice of medicine. The 1972 motion was put again and defeated.

Council received Dr. Graham's resignation with an expression of sincere appreciation for the excellent leadership he had provided his committee during the past three years.

Maternal & Perinatal Health Committee Report – Dr. D. W. Cudmore, co-chairman of this committee, presented the report on behalf of Dr. P. W. S. Watts expressing his apologies for his inability to attend. Dr. Cudmore reported that the Reproductive Care Project had been approved by Government but that the original budget had been decreased by 33 percent; also noted was the fact that this project would be managed through the Medical Society. Council approved recommendations that hospitals in Nova Scotia continue to be urged to form Perinatal Mortality Review Committees and activate them, and that Nova Scotia physicians continue to recognize the high risk obstetric patient, acquire early consultation and when necessary, refer the patient to hospitals better equipped to manage this type of patient.

Dr. Cudmore reported a major factor in the review of perinatal mortalities in Nova Scotia is a result of several deficiencies – i.e. no access to the prenatal patient record, complete lack of uniformity of records, and inappropriate data recording from existing records. Council approved recommendations that the Society recommend the adoption of uniform records for both office and hospital use for obstetric and neonatal care, that government be approached to provide these records to all physicians practicing obstetrics in the Province, that a prenatal record be designed in such a fashion that part of the record will be forwarded to the hospital where the patient will be delivering and hence become part of the permanent hospital record.

Medical Education Committee – Dr. A. Prossin's report began with a comprehensive review of activities of his committee to the point at which he assumed chairmanship in 1973. He reported that the Hospital Insurance Commission responding to the Society's recommendation that it extend medical audit systems to community hospitals requesting this service, made available presentations on both PAS and HMRI. The purpose of these was to move toward selection of a single system to apply overall in Nova Scotia. Dr. Prossin reported that a decision in this respect had not yet been reached.

Expressing the committee's view that patient care appraisal programs (medical audit) are an extremely important educational tool in continuing medical education, he went on to state that it is important that policing factors inherent in a medical audit system do not become the major consideration in adoption of such a program by a hospital.

Dr. Prossin said that data emanating from a quality assessment program may be classified into three categories – i.e. technical data, professional interpretation, and statistical analyses. The technical data would include specific information relating to individual patients such as presenting systems, clinical history, physical examinations, and testing results. Professional interpretation would include judgement concerning the technical data such as reason for admission, promptness of admission, prematurity of admission, appropriateness of lab or x-ray data, necessity for surgery as well as length of stay and follow-up. Statistical analyses would compare performance of groups of physicians or hospitals to provincial or national norms. This would include such things as rates of admission, frequency of specific tests, and rates of normal tissue findings. His committee believes that technical data and professional interpretation belong in the realm of the medical audit committee of the hospital, whereas statistical analyses would be of special interest to hospital record librarians or other groups if applied on a broader basis. He concluded his report with the recommendation that we continue to investigate a system of medical audit or patient care appraisal suited to community needs which will evaluate the quality of medical care; and that the purpose be continuing medical education and not the control over use or restriction of staff privileges. This recommendation was carried.

Discussions on the implications of patient care appraisal programs followed, the matter of policing being of special interest. In response to questioning, Dr. Banks agreed that there is an element of policing in medical audit but in his view such a system is 90 percent continuing medical education, and added that both are required. The firm opinion was expressed that the profession should ensure that all aspects of a medical audit program are kept in control and under the direction of the profession.

Medical Religious Liason Committee – Dr. S. M. Woolf presented the report on behalf of the Chairman, Dr. Chas. F. Brennan, who was unable to attend. The main subject of the report was the matter of genetics and expressed in such a manner that it was felt by Council to relate to a major extent to medical ethics. The report was therefore referred to the Ethics Committee for study and report next year.

Membership Services Committee – Dr. C. D. Vair brought to the attention of Council the steady increase in Society membership and stated his committee was working hard to achieve 100 percent membership without the necessity of compulsion. Speaking on the question of tax deductibility of membership dues, Dr. Vair said that few salaried physicians are aware of the persistent efforts of the Society to have these dues qualify as a deductible item. Dr. Vair informed Council that the Society is sincerely concerned and aware of its responsibilities in relation to the welfare of salaried physicians. He reported that a meeting has been called for later in the year in an attempt to activitate the existing Section and encourage it to work toward solution of its problems. Staff expertise in the field of economics and remuneration are expected to add impetus to activity in this regard. Discussion ensued as to the role of the Medical Society in relation to responsibility for negotiating on behalf of salaried physicians. It was resolved that during the coming year the Officers and Executive of the Medical Society of Nova Scotia study the question of negotiating on behalf of salaried physicians and prepare an appropriate proposal for Council to consider next year.

Dr. Vair's report included a detailed summation of the Society's insurance program. Its gain to date in terms of membership and volume of business are impressive. Without doubt the membership increase in the Society is related to the availability of this excellent program.

Nutrition Committee – Dr. C. N. Williams reported to Council that a number of articles for the Bulletin had been prepared during the year. It was approved that these educational articles be continued. Dr. Williams expressed concern with the increasing rate of malnutrition and the absence of adequate documentation relative to this subject. His proposal that a questionnaire be circulated to practicing physicians to document this incidence of malnutrition was defeated in the belief by Council that the recent National Health and Welfare Study had achieved this adequately; as well it was believed by Council that such a questionnaire would produce very little factual information.

Occupational Medicine Committee – Dr. D. S. Reid reported on his attendance at a recent meeting of a group of interested individuals to consider the formation of a Canadian Council on Occupational Medicine. Dr. Reid's recommendation that the Medical Society of Nova Scotia endorse such a Council was defeated by Council because of the absence of adequate definition of its role as well as its place in the hierarchy of medical affairs. It was agreed that Dr. Reid should maintain continuing interest in development of such a Council and report to the Society at a later date.

Pap Smear Committee – Dr. R. C. Fraser reported that his committee was concerned with problems relating to the pap smear program such as (a) the necessity of such a program in Nova Scotia, and (b) modification of any such program to include establishment of a Pap Smear Registry, improved coverage to susceptible women, establishment of more precise criteria relative to pap smear intervals, and an improvement of quality care programs. He indicated his committee would report to the Society in the near future.

Presidents' Liaison Committee – Dr. J. A. Myrden reported that during the past year his committee had maintained excellent dialogue with government through continuing conversations with the Premier, Minister of Public Health, the Health Council, the Insurance Commission, as well as other associations such as the Hospital Association, and Nova Scotia Pharmaceutical Society. He also drew attention to the two meetings of the Section Chairmen and Branch Presidents which had been most useful in maintaining communications with the membership from both a specialty and geographical point of view. As well the Branch Society Meetings had served a useful purpose in maintaining membership awareness and involvement in Society affairs. Dr. Myrden also reported on the Atlantic Provinces Presidents' Meeting which was held the day before Council began. Agenda subjects included manpower distribution, government relations, exchange of economic data and the value of future meetings. It was agreed that they should continue.

Dr. Myrden reported that arising out of a resolution passed at last year's annual meeting the Society had embarked on a program whereby consulting services are provided on request to hospital boards of trustees relative to medical operations in hospitals. He noted that three hospital boards have approached the Society in this respect and that the effect appears to be worthwhile. He expressed the belief that this activity will on a long term basis constitute a major contribution towards improvement of quality of care in the Province.

Dr. Myrden reported that the Tariff Development Committee of the Commission is actively involved in the August (1973) Tariff Review. He reported on progress made by this committee in other respects – examples of which were attaining agreement to give radiologists the option for payment according to the Schedule of Fees, Fee Schedule revisions in the order of one and one half million dollars effective April 1973, approval for pathologists to be paid according to the Schedule of Fees, as well as numerous other activities in rectifying deficiencies in the Fee Schedule.

Dr. Myrden concluded his report with comments on the value of public relations consultant service to the Society. He noted the many instances when his role was considerably eased by availability of expert advice in dealing with the public, news media, and government.

Public Health Committee Report – Dr. Walkes' first remarks were related to the subject of pollution. Noting that the Environmental Council had been formed it appeared that it was not developing adequate policy nor was it being effective in reducing pollution problems in Nova Scotia. A recommendation was approved that the Environmental Council should survey the progress and activities of the Provincial Government in the light of its own policy, to determine the extent to which such programs and activities are contributing to the achievement of the policy and make necessary recommendations to the Minister. A recommendation was also approved that the Environmental Council investigate, study, research, analyze, promote, and foster all projects to improve environmental quality, and suggest recommendations with respect to changes in legislation to the Minister. Continuing, Council approved a resolution that there be clearer emission standards, water quality standards, noise emission standards developed by the Environmental Council of Nova Scotia. Concluding the debate on this particular subject, Council approved a recommendation that new waste disposal controls be formulated by the Environmental Council.

The committee reported that there exists no comprehensive health care for the aged and chronically ill in the Province and suggested that the government be encouraged to develop programs in this regard. It was moved that the provincial government and Health Services and Insurance Commission finance the operation of chronic care facilities and that there be regional chronic facilities established in addition to local facilities. These were both approved.

Dr. Walkes reported that his committee members felt that far too many people, especially younger people are not receiving adequate counselling before sterilization procedures are carried out. His recommendation that the Society sponsor a medical student project which would study the medical, social, and psychological effects of sterilization in Nova Scotia was defeated and referred to the Executive Committee for consideration. The general opinion appeared to be that such a study would be impractical and that this information is in fact generally well known to most physicians.

As a step to ensure lower complication rates from abortion procedures the committee recommended that the policy of the Nova Scotia RH Committee be endorsed by the Society; this states that before abortion is performed RH blood grouping be done on the patient. This was approved.

Public Relations Committee Report – Dr. K. P. Smith introduced his report stating it was a detailed summary of the activities of the Public Relations Consultants on behalf of the Society over the past year. This included their attendance at Officers' Meetings to provide counsel and take action in those areas where Society business bears directly on public interest and when it is important that Society decisions be made known and explained to the widest possible audience, attendance at Executive Committee meetings with the same objectives, continuing liaison with the

President the Officers and the Executive Secretary, and direct assistance to the Society in matters of governmental and professional contact.

Dr. Smith reported that the PR Consultants performed extremely well and had fulfilled all their commitments to the Society. He expressed the view and this was supported by Council that the value of public relations consultants is considerable indeed.

Rehabilitation Committee Report – Dr. A. H. Shears reported on specific problems relating to rehabilitation in Nova Scotia. First is the shortage of physiotherapists, the need to increase output is considerable. A recommendation that the Society strongly recommend to the Province of Nova Scotia and Dalhousie University that they take the necessary action to increase the output of qualified physiotherapists was approved.

The shortage of occupational therapists was also highlighted and a resolution that the Society strongly recommend to the Province that it take action with Dalhousie University to establish a training school for occupational therapists even if the other Atlantic Provinces are not interested was approved.

The committee once again expressed the great need for a strong centrally placed Rehabilitation Centre, properly equipped, and functioning as an autonomous hospital. The reasons for this are that rehabilitation of patients with major problems that cannot be handled totally at the local or regional level and requirements for a training centre to assist in clinical training of physical treatment and rehabilitation personnel so that better staffing could occur in local and regional hospitals. The shortage of beds for training of therapists is critical indeed.

The discontinuation of bursaries for training of auxiliary health personnel by the Health Services and Insurance Commission resulted in approval of a resolution that the Society make a strong request to the Health Services and Insurance Commission that bursary incentives for training of auxiliary health personnel not be abolished in view of the continuing shortage of auxiliary personnel in the Province.

Traffic Crash Committee – Dr. D. P. Petrie presented this report on behalf of Dr. S. F. Bedwell who was unable to be present. He noted that at the invitation of the Provincial Government Crash Counter Measures Committee the Traffic Crash Committee members had spent the entire year devoting their efforts to co-operating in attempts to develop programs designed to reduce the traffic crash incidence and improve emergency care.

Workmen's Compensation Board Liaison Committee – Dr. A. H. Shears reported that the major activity of this committee during the past year was development of the brief to the Provincial Government's Select Committee examining the Workmen's Compensation Act. Dr. Shears outlined the recommendations that had been included in the brief. Primarily, these dealt with workmen's appeal procedures, levels of disability allowance, the W.C.B. referral and consulting organization, and the functioning of the W.C.B. Medical Review Board.

Medical Manpower – Ad Hoc Committee – Dr. M. R. Macdonald informed Council that his committee had spent the year developing a physician questionnaire required to update the Provincial Medical Manpower data bank. He noted this would be sent to all doctors with their annual licensing invoice and that it would be a one-time effort. He spoke to the importance of development of a comprehensive data bank for purposes of planning physician education and urged all doctors to co-operate by completing and returning the form. He informed Council that the Executive Committee had considered the questionnaire in some detail and had endorsed it.

C.M.A. Council on Community Health – Dr. A. C. Walkes commented first on the importance of communications between divisions and the representatives to C.M.A. Councils. Dr. Myrden expressed strong agreement pointing to the organization in Nova Scotia whereby Council representatives attend and report to all Executive Committee meetings and that each of the representatives consult with the Chairman of the Executive Committee and Executive Secretary before and after the meetings of their Councils. Council agreed that the effectiveness of its representatives to C.M.A. Councils is dependent to a major extent on their knowledge and awareness of Nova Scotia attitudes, opinions, and positions. As well it was agreed to be essential that Nova Scotia be kept fully in the picture relative to the activities of C.M.A.

Dr. Walkes informed Council of the various subjects which his C.M.A. Council would discuss in the coming year, and requested that any physician having attitudes or opinions on such subjects as amphetamines, family life education, school health, age of consent, etc. should make known their views through the Society. He indicated his Council was considering the formation of a local peer committee in each province to help physicians in trouble with drugs, alcohol, etc. This particular idea was viewed with some concern by the Society and referred to the Executive Committee for further study. (Secretary's note, subsequent consideration by the Executive Committee resulted in disagreement with the proposal.)

C.M.A. Council on Economics – Dr. G. C. Pace's report included reference to three recommendations referred by C.M.A. General Council to his Economics Council for study. He sought the views of the Medical Society in this respect. The recommendations were referred to the Executive Committee for study and recommendation to Dr. Pace.

C.M.A. Council on Medical Education – Dr. S. G. B. Fullerton stated that the purpose of his report was mainly to update Nova Scotia physicians relative to his Council program and that he would be taking full advantage of views and opinions expressed to him by the Medical Society of Nova Scotia. Dr. Fullerton indicated that the major concern of the Council will be in relation to defined licensure. He noted that C.M.A. General Council had given approval to the concept that a medical license should define practice capabilities according to training and/or experience, maintenance and continued demonstration of competence, and voluntary redefinition according to new training or experience, or voluntary restriction of scope of practice. He stated that his Council will be concerned now with development of ways and means to implement the principles approved. Dr. Fullerton noted that continuing medical education programs, will play an important part as attempts are made to design programs for maintenance and demonstration of physician competence. A task force considering this aspect of the subject is expected to begin functioning in the very near future.

C.M.A. Council on Medical Services – Dr. H. J. Bland reported that to date only one meeting of his Council had taken place. It was devoted to the establishment of goals. The Council will likely conduct an inquiry into primary medical care in Canada. Dr. Bland indicated that in years past his Council had had some difficulty in determining the role it should fill. However, this appears to have been resolved by the appointment of a new chairman who has clear ideas on problem areas in relation to provision of medical services.

C.M.A. Council on Membership Services – Dr. D. B. O'Brien's report summarized the activities of this Council during the past year. He spoke on C.M.A.'s Registered Retirement Savings Plan, its investment programs, and its program of lending money for establishment of practices. He also spoke of the considerable effort that C.M.A. has made in relation to tax problems such as deductibility of membership dues and expenses relating to continuing medical education.

C.M.A. is concerned about the number of physicians who do not appear to be making adequate arrangements for their future financial well being. Dr. O'Brien encouraged all members to take greater interest in this subject and contact the Medical Society office for further details and assistance.

C.M.A. Board of Directors – Dr. W. F. Mason reported that the activities of the Board are wide indeed. Of special interest would be C.M.A. intention to undertake a review of the Council system and consideration of the Pickering Report which was a study commissioned by the Ontario Medical Association. Dr. Mason also spoke on the importance of the C.M.A. Board member liaising closely with the Society Executive Committee and staff. He indicated this was most beneficial as he attempted to represent Nova Scotia physicians.

Board of Registration – Certified Nursing Assistants – Dr. R. Mishra reported that the C.N.A. Board is considering changes in its Training Program. This comment stimulated lively debate surrounding the role of the C.N.A. relative to the nurse and training programs required for these individuals. Concern was expressed that the C.N.A.'s were proceeding independently and without co-ordinating their programs with other health personnel. Dr. Simms stated this was not entirely true but that a joint committee of the nurses and the C.N.A.'s were studying this problem. Concern of the Society that management of the C.N.A. program is inadequate resulted in approval of a resolution that the Medical Society of Nova Scotia Executive Committee take under advisement the matter of the training and functioning of Certified Nursing Assistants in the Province of Nova Scotia, and their relationship to the nursing profession also be considered during the coming year.

Board of Registration – Nova Scotia Association of Social Workers – Dr. E. A. Smith reported that the Association of Social Workers no longer requires a Medical Society Board member and legislation to this effect has been passed. Council acknowledged elimination of this appointment.

Maritime Medical Care Inc. President's Report – Dr. A. N. Lamplugh's report made note that 1973 is the silver anniversary of the Corporation. The major thrust of his report was reference to the excellent relations existing between the Corporation and the Medical Society. The Medical Society recognition of this fact by passage of a resolution reading "That the Executive Committee of The Medical Society of Nova Scotia strongly reaffirms its support of the concept of a Board of Maritime Medical Care Inc. having a majority of practicing physicians (who must be members of the Medical Society of Nova Scotia) remaining as the fiscal agent for the Nova Scotia Government sponsored medical care insurance program, and has the final authority in items concerning peer review" was very much appreciated. Dr. Lamplugh noted too the activity of the Corporation in the design of M.S.I. physician profiles and pointed to the co-operation between M.M.C. and the Society in physician profile review. Dr. Lamplugh stated that the Corporation was particularly proud that it had been selected by the Australian Government to assist in the design of their medicare program.

Medical Advisory Board – Nova Scotia Tuberculosis and Respiratory Disease Assoc. – Dr. J. J. Quinlan reported on the activities of this group noting that the study of incidence of chronic obstructive lung disease in Nova Scotia was completed and Dr. Helen M. Holden's findings were presented to the association during 1973. The study findings confirmed that chronic respiratory illness poses a problem of the first magnitude; action to counter this problem was taken by the association as it sponsored a program of home care utilizing public health nurses. The program is reported to be well underway and it is hoped that provision of this supervision in the home will reduce repeated admissions to hospital. Dr. Quinlan also referred to financial support provided by the association for research and training programs. In conclusion he expressed appreciation for the continuing excellent co-operation received from practicing physicians in the Province in joint efforts to do something about the huge problem of chronic respiratory disease.

Nova Scotia Health Council Report – Dr. J. F. L. Woodbury presented a comprehensive summary of the role and activities of the Health Council noting that the Health Council had undertaken a major review of health programs in Nova Scotia and published a report "Health Care in Nova Scotia, a New Direction for the Seventies". He said there would be no need for further major reviews; however, it is intended that the Health Council will continue to keep under continuing review progress relative to change and rationalization of the health system in the Province. Additionally, the Health Council will be involved in a number of specific projects, examples of which are the following – review of hospital by-laws, concern with the nursing shortage, continuing review of levels of care and conduct of studies to determine health personnel requirements, and consideration of the future of the North End Community Clinic and its role in that community.

In conclusion Dr. Woodbury noted that the Health Council remains accessible to any special interest or citizen group which wishes to propose improvements to the health care delivery system. He said the Health Council is particularly aware of the contributions made by the Medical Society to its deliberations over the past few years and encourages a continuation of this association.

Provincial Liaison Committee on Nursing – Dr. J. A. Myrden presented this report on behalf of Dr. G. D. Douglas who was absent due to other commitments. Dr. Myrden pointed to this committee as being an active and productive one, the membership of which is made up of representatives from the Nursing Association, the Provincial Medical Board, the Hospital Association, and the Medical Society.

Dr. Myrden reported that during the year the committee had developed a document "Patients' Rights to Ethical and Dignified Care in a Hospital Within the Province of Nova Scotia". With certain amendments the proposed patients' rights document was approved by Council. Following its endorsation by the Nursing Association and Provincial Medical Board it will be released jointly.

Also approved by Council was a recommendation that when authorized by a hospital board, the medical staff, and administrator of a currently registered institution, nurses be permitted to administer no more than ASA compound 600 milligrams to patients, pending consultation with the physician, and when none of the following contra-indications exists: (1) patient has never taken ASA previously, (therefore there is a danger of fatal or serious idiosyncracy.) (2) patient has a history of allergy to ASA, (3) patient is in a coma, including diabetic coma, or in a confused state, (4) patient is suffering from organ failure: lung, kidney, heart or liver, (5) patient is suffering from a bleeding disorder, or is on anti-coagulant therapy, (6) patient has a peptic ulcer, (7) patient has a history of drug addiction.

Provincial Medical Board Representative Report – Dr. K. P. Smith reported on activities of the Board during the past year noting that in association with the Federation of Provincial Medical Licensing authorities it has developed a program of on-sight inspections of intern training programs in Nova Scotia. Dr. Smith also reported on changes in regulations relative to internship training and specialty registration.

Also noted was considerably increased activity in relation to disciplinary hearings, the results of which were losses of seven licenses in the Province. The Board has also beem involved in the problem of drug abuse as it relates in particular to prescribing habits of certain physicians. Dr. Smtih reported that changes in the Medical Act passed recently by the legislature have been of assistance to the Board in taking more effective action than was possible in the past. He also highlighted the seriousness of signing certificates of illness when the physician did not have satisfactory knowledge of the illness.

RH Committee Report – Dr. R. S. Grant reported on the high level of activity of his committee during the past year. It has been active in a three-phase program relating to service, prevention, and education. Specific recommendations approved by Council are as follows: (1) That physicians endorse the practice of having RH testing done at the patient's first prenatal visit. (2) That placental localization be done before any initial amniotic tap in order to lessen the incidence of blood-contaminated taps. (3) That physicians recognize RH Hemolytic Disease as high-risk and refer their cases early to the committee for assistance in management. (4) That the project at the Grace Maternity Hospital of blood checking on admission and the use of the Kleihauer Test be adopted at all hospitals in Nova Scotia in order to assure every new mother who qualifies receives protection with RH Immune Globulin. (5) That a program of developmental follow-up be carried out on surviving Intrauterine Transfused children. (6) That the Society endorse the principles and practices of this committee.

Canadian Cancer Society – Nova Scotia Division – Dr. R. C. Fraser pointed to the importance of the Society being represented on the Board of the Nova Scotia Division of the Canadian Cancer Society. He stated that this representative usually acts as Chairman of the Medical Advisory Committee and matters of medical and research nature are referred to it. He is also a member of the Patients Services Committee. As a member of the Board of Directors he also assists in the general administration of the division. Dr. Fraser's report dealt in some detail on the divisions activities in relation to welfare, education, and research. Pointing to an item of special interest Dr. Fraser said that in order to recognize the services rendered to the cause of cancer control by Drs. Norman and Margaret Gosse the division inaugurated the "Margaret and Norman Gosse Visiting Lectureship" available to those departments of Dalhousie Medical School concerned with some phase of cancer diagnosis, treatment and research.

Discussion developed during presentation of this report on the relationship of smoking and cancer. Council subsequently approved a resolution "That the meeting go on record as expecting its members to refrain from smoking during meetings in order to emphasize the dangers of smoking. In this way the membership of The Medical Society of Nova Scotia by example will demonstrate their concern about the importance of tobacco in contributing to and causing preventable disease."

V.O.N. Home Care Program – Dr. W. F. Verge reported that subsequent to submitting his report to Council he had attended a Board Meeting of the V.O.N. He spoke in some detail on the programs of the V.O.N. and how they contributed to improved service and cost reduction. He urged the Society to support these programs. Secondly, he referred to the financial difficulties the V.O.N. continues to encounter and the anticipated short fall of approximately $45,000 in this year's operating budget which would have a serious effect on the level of service provided by the V.O.N. Support of the V.O.N. program came from a number of sources and Council approved a resolution that the Medical Society of Nova Scotia support the V.O.N. in their request to Government for financial assistance and in their program of home care in the future, as suggested by the report from the Health Council.

Canadian Academy of Sports Medicine – Dr. M. R. Banks, President of the Nova Scotia Chapter reported continued expansion and welcomed physicians to join in these very productive programs. He said the Chapter has become associated with Sports Nova Scotia and has obtained a grant

towards educational programs. Seminars have been held for coaches, trainers, physicians, and paramedical personnel to improve their capabilities in dealing with sports injuries.

Dr. Banks informed the meeting that in 1974 Dr. J. A. Smith of Dartmouth will represent the Provincial Chapter of C.A.S.M. as a member of the medical group travelling with the Canadian team to New Zealand for the British Commonwealth Games.

Crash Counter Measures Committee – Dr. David P. Petrie presented a most comprehensive report on the activities of the Provincial Government's Crash Counter Measures Committee. He noted that membership is quite broad representing all groups remotely connected with the problem. Included as a member is Dr. S. F. Bedwell who is also alternate member to Dr. Petrie from the Society. Dr. Petrie pointed to a long list of suggestions considered by the committee noting it has approved the adoption of the Society's resolution regarding reporting of unfit drivers. Also deemed necessary by the committee is a system for retesting of driver license holders. The absence of adequate statistics has been pointed to by the committee with concern; absence of standards relating to ambulance attendants, drivers and their vehicles is another serious matter that the committee has considered. The committee has also discussed and made recommendations relative to the terrible toll being exacted upon our health facilities as a result of the extreme crash situation in the Province. Needless to say Dr. Petrie's report gave considerable attention to the problem of the drinking driver noting that the committee has made a number of recommendations to the provincial government. These include increasing the authority of police officers to stop drivers for the purpose of administering blood alcohol tests as well as taking of blood alcohol analyses at hospitals without written consent of the patient involved in a fatal or non-fatal accident. Increased police services are also indicated. Also required are massive increases in the effort toward educating people on the subject of the crash program and driver competency.

Dr. Petrie's report was discussed at some length and the following resolutions were passed: (1) "That The Medical Society of Nova Scotia promote and encourage a program of public education regarding the significant and extreme nature of traffic crashes." (2) "That The Medical Society of Nova Scotia encourage the Department of Public Health to assume complete responsibility to standardize ambulances; employ properly qualified personnel; upgrade equipment standards; establish an efficient communications system via 2-way radios." (3) "That The Medical Society of Nova Scotia study and recommend adoption of changes in the legislation which would require post mortem examinations of all fatally injured people." (4) "That Local or Regional groups consisting of interested physicians and laymen including policemen or R.C.M.P. to look into and investigate local problem situations both on highways, emergency care, and legal difficulties arising out of the motor vehicle accident situation." and (5) "That The Medical Society of Nova Scotia promote an examination of the use and availability of emergency care facilities in the Halifax Metropolitan region."

Medical Advisory Committee on Driver Licensing – Dr. C. C. Giffin reported on the extensive activities of the Provincial Highways Department's Medical Advisory Committee on Driver Licensing. Arising out of Dr. Giffin's report were the following recommendations approved by Council. (1) "That increased efforts be made and study be given jointly by the Medical Society of Nova Scotia and the Department of Highways to find more satisfactory ways of coping with those who cannot be clearly declared medically unfit but by reason of temperament or habits cannot be considered well suited to the operation of a motor vehicle and therefore constitute a hazard." (2) "That in cases coming before the committee where certain kinds of information are likely to be required (e.g. sworn affidavits; character and habits reference from police) that this information be collected by the Department without committee approval or sanction in order to facilitate the work of the committee." (3) "That the 'Guide for Physicians Determining Fitness To Drive A Motor Vehicle' which was produced by the C.M.A. be accepted for use in Nova Scotia." (4) "That an effort be made to educate the public that in cases of awarding driving privileges where medical fitness is a factor that decisions are made on the recommendations of the committee as a whole and that the individual physician who submits a report should not be held responsible." (5) "That a physician serving on the Medical Advisory Committee on Driver Licensing be discouraged from examining and reporting on patients coming before the committee when such examination is requested by a third party and where possible conflict of interests arise, especially in cases involving litigation." (6) "That the medical form for driver fitness for licensing have a place for the opinion of the examining doctor to be invited to express his opinion but not required for completion of the form."

Section for Anaesthesia – Dr. W. A. P. Thompson reported that his Section had discussed the subject of physician assistants in anaesthesia and the anaesthesia fee schedule. A number of members of Council, noting that the Section had discussed the possibility of physician assistants being introduced in the practice of anaesthesia in Canada with physician supervision on a one to one basis, expressed concern with such a proposal and requested that it be watched with the greatest of care as it could introduce more problems than it might solve.

Section for General Practice – Dr. M. A. Smith presented this report on behalf of the Section. Dr. Smith expressed concern that arrangements still had not been made for provisions of measles vaccine in doctors' offices free of charge. His request that this matter be pursued resulted in approval of the resolution "That measles vaccine be provided in doctors' offices by the Department of Public Health free of charge".

Dr. Smith gained support of the Society of its concept that there be equal pay for equal services in the Society's Fee Schedule.

Council also approved a resolution "That the report of the Ad Hoc Committee on Pap Smears regarding payment of same be adopted". It was noted that this already was in effect.

Section for Internal Medicine – Dr. A. J. MacLeod reported in some detail on the activities of his Section during the past year. The subject of Section representation on the Executive Committee of the Society was discussed and agreed to. However the other Sections did not favour such a course of action and promoted instead the formation of an ad hoc committee of Section Chairmen to deal with items relating to two or more Sections. Dr. MacLeod noted, too, that the Section's Standards Committee was well organized and prepared to undertake any commitments assigned to it by the Society.

Section for Psychiatry – Dr. H. K. Hall reported that there is a problem concerning the staffing of mental health clinics within the Province and that it is understood the Provincial Medical Board is being approached to allow physicians with standards of training below that of the F.R.C.P. (C) or its equivalent to be licensed to practice as specialists in Psychiatry in these community settings. His Section believed that such an arrangement would be a retrogressive step since it would represent a lowering of professional standards in an attempt to staff which should be key positions in the community. Council approved recommendations that the Provincial Medical Board be made aware of our views in respect to a change in regulations as outlined above and secondly, that this meeting of Council request the Provincial Medical Board when considering present or future proposals for changes in the regulations that would affect the professional standards of medical care, seek the evaluation of any segment of the profession that would be particularly knowledgeable about the effects of such changes. This could readily be done through the Medical Society of Nova Scotia.

Section for Radiology – Dr. W. F. Mason expressed the Section's sincere appreciation to the Medical Society for its efforts in bringing about a situation whereby radiologists may now be paid on a fee-for-service basis.

Chairman of the Executive Committee – Dr. P. B. Jardine introduced his report by noting that much of the activity of the Executive Committee had been reported to and considered by Council as it dealt with the various committee and representative reports. He noted that his report was laid out by topic and he would be prepared to discuss any of the activities of the Executive Committee should this be the wish of Council. By resolution Council endorsed the actions of the Executive Committee during the past year.

Following presentation of Dr. Jardine's report Council resolved a sincere vote of thanks to Dr. Jardine for the very hard work he has done on behalf of the Society during the past three years. This was carried unanimously.

Dr. Jardine expressed his gratitude for the expression of thanks and in return expressed his appreciation to all members of the Executive Committee, especially those who retired at this particular time. He congratulated the new members appointed to the Executive Committee and wished them success in their endeavours during the coming year.

Annual Meeting – On four occasions during the course of the Meeting of Council, the Society was called to order in session of the Annual Meeting to ratify the actions of Council and hear the President's

Valedictory Address. Dr. J. A. Myrden's address appears in the December 1, 1973 issue of the Nova Scotia Medical Bulletin.

The Society considered the report of the Nominating Committee and approved appointment of Branch Representatives to the Executive Committee as listed in the February 1, 1974 issue of the Nova Scotia Medical Bulletin. Alternates approved were as follows: Antigonish-Guysborough – Dr. B. R. Steeves; Cape Breton – Dr. M. R. Rajani & Dr. E. C. McDonagh; Colchester East Hants – Dr. D. G. Dewar; Cumberland – Dr. M. P. Quigley; Dartmouth – Dr. F. J. Hanko; Eastern Shore – Dr. P. B. Jardine; Halifax – Drs. J. A. Delahunt, B. L. Reid, and R. W. Napier; Lunenburg-Queens – Dr. Anna O'Neil; Pictou – Dr. W. A. Hyslop; Shelburne – Dr. J. U. MacWilliams; Valley – Dr. George Kenny; and Western – Dr. G. V. Burton.

The Society approved the following to serve as the Medical Society Nominating Committee (1974). Antigonish-Guysborough – Dr. T. W. Gorman, Alt. Dr. R. Sers; Cape Breton – Dr. H. J. Devereux, Alt. Dr. A. L. Sutherland; Colchester East Hants – Dr. C. C. Giffin, Alt. Dr. S. G. MacKenzie; Cumberland – Dr. M. P. Quigley, Alt. Dr. J. P. Donachie; Dartmouth – Dr. J. F. O'Connor, Alt. Dr. D. M. Andrews; Eastern Shore – Dr. P. B. Jardine, Alt. Dr. R. J. Fraser; Halifax – Dr. D. K. Murray, Alt. Dr. J. H. Quigley; Lunenburg-Queens – Dr. F. G. Bell, Alt. Dr. A. H. Patterson; Pictou – Dr. H. A. Locke, Alt. Dr. R. G. Munroe; Shelburne – Dr. J. H. L. Robbins, Alt. Dr. F. Markus; Valley – Dr. H. R. Roby, Alt. Dr. James Seaman; Western – Dr. C. R. Wyman, Alt. Dr. G. V. Burton.

The following nominations were approved: President-Elect – Dr. D. B. O'Brien; Chairman, Executive Committee – Dr. J. F. Hamm; Vice-Chairman, Executive Committee – Dr. M. A. Smith; Treasurer – Dr. G. C. Pace; Honorary Secretary – Dr. T. J. McKeough.

On call for new business Dr. G. C. Pace, newly appointed Treasurer, expressed concern that the budgetted surplus would in fact be achieved due to the rapid escalation of costs and potential for unexpected large expenditures. He stated that it had been his intention to move an increase in membership dues for fiscal year 1974 but appreciating the administrative difficulties involved, the level of Society assets, and the short notice of his proposal he had decided against such a course of action. In his role as Treasurer and Chairman of the Finance Committee he indicated he would exercise tightest possible control on expenditures.

The 120th Annual Meeting of the Medical Society of Nova Scotia adjourned at 12:00 noon, November 10, 1973.

ANNUAL MEETING EXHIBITS

The Medical Society of Nova Scotia wishes to express its sincere appreciation to those firms which exhibited at our Annual Meeting in November 1973 at the Hotel Nova Scotian.

LIST OF EXHIBITORS

Arlington Laboratories
Boehringer Ingelheim (Canada) Ltd.
Burroughs Wellcome & Co. (Canada) Ltd.
Calmic Limited
W. Carsen Company, Ltd.
Cooper Laboratories Limited
Coulter Electronics of Canada Ltd.
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Eaton Laboratories
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Charles E. Frosst & Company
Geigy Pharmaceulticals
ICN Canada Limited
Lederle Products
Maritime Medical Care Inc.
Merck Sharp & Dohme Canada Ltd.
Murray G. Bulger & Assoc. Ltd.
Bank of Nova Scotia
Pfizer Division
Poulenc Limited
A. H. Robins Co. of Canada Ltd.
Wm. H. Rorer (Canada) Ltd.
Rougier Inc. Laboratories
The Royal Trust Company
Techicon International of Canada Ltd.
The Upjohn Company of Canada
Warner-Chilcott Labs. Ltd.
Welcker Lyster Limited
Winthrop Laboratories
P. M. Robinson & Assoc. Ltd.

Medical Society members appreciate the extensive financial contributions that exhibitors make toward defraying the costs of conducting an Annual Meeting. As well, the additional expense of preparing exhibits and arranging for the displays are also recognized. Most important, however is the opportunity the exhibitors have given to members of the profession to meet with representatives of the various firms for discussion of new products and services available to them.

Members of the Society are encouraged to convey their gratitude by giving the exhibitors' representatives an extra expression of appreciation on the occasion of their next encounter. □

D.D.P.

Diet and Health Foods

J. L. Johnston,* B.H.Sc., P.Dt.

Halifax, N.S.

In order to determine the value of "health foods" in normal nutrition and approach the situation rationally, the terms involved will be defined.

"Health food" is promoted as a food which gives or assures health, has health giving or curative properties, usually natural or organically grown. In Canada, it is illegal to advertize a food as a treatment or cure.[1]

Organic foods are those grown on soil with only organic fertilizer, i.e. decomposed manure and/or waste products from crops returned to soil, and/or additional humus and quartz compound.

Non-organic foods are those raised with the aid of commercial fertilizer, pesticides and chemical weed killers.

Vegetarians may comprise one or more of four types:

1. Lacto ovo vegetarian (all vegetable diet plus milk, cheese and eggs).
2. Lacto vegetarian (all vegetable diet without any animal foods or eggs).
3. Pure vegetarian (all vegetable diet without any animal foods, dairy products or eggs).
4. Fruitarian diets (consisting of raw or dried fruits, nuts, honey and/or olive oil).

"Health foods" are frequently consumed within a vegetarian diet plan.

Nutrition is defined as the total of mechanical and chemical processes in which nutrients of food are digested, absorbed, transported, metabolized and excreted in the metabolic processes to support life, growth and maintenance of tissue.

Nutrients are the individual chemical substances contained in food, and used to nourish the body, i.e. carbohydrates, proteins, fat, vitamins, minerals and water.

The following information was reviewed by the Nutrition Committee of the Canadian Dietetic Association to clarify the present status of nutrition and its application in the feeding of humans.[2] In Canada, the Government is responsible for assessing the available scientific information about food and nutrition and for establishing standards which can be used to ensure nutritionally adequate diets. The Health Protection Branch of the Department of National Health and Welfare is responsible for the Food and Drug Act and Regulations defining what constitutes a food, standards of purity, tolerance for additives and residues; in other words, the wholesomeness of our foods. The Nutrition Division of the Department of National Health and Welfare determines the nutrient requirements of humans and publishes recommended daily allowances of food composition. The data of daily allowances and food composition is translated and simplified into Canada's Food Guide. When this guide is followed, the nutrition requirement for optimum health is met.

The history of food fads is as old as the history of food itself. Food fads or cults have their basis in religion, history, myths and magic, and socio-cultural phenomena.

Factor Promoting the Growth of Food Fads

1. A feeling exists concerning the potential dangers connected with the use of biocides in farming, husbandry and food industry.
2. There is also uneasiness about the frequent use of chemicals in food production with the purpose of improving preservation, texture or taste or to serve as substitutes.
3. There is widespread concern about chemicals employed in all kinds of industries which in unforseeable ways might enter into the biological food chains.
4. In spite of a rather legislation, there remains among the public a sense of anxiety or uncertainty.

A certain concern among people about biocides and chemical additives is understandable and not unreasonable. Unfortunately at the same time it forms a fertile ground for the activities of the nutrition quacks.

Factors Characterizing Food Fads

1. strong emotional appeal to health and beauty
2. interrelation of fact with fallacy, faulty documentation of facts
3. rejection of conventional medical and nutritional standards
4. denial that they are faddists, but claim that the success of their methods has been rejected by medical doctors and nutritionists who lack understanding or are "warped"
5. claims and promises about their beliefs
6. use of food terms such as "health giving", "pure", "natural", "vital foods", or "empty", "lifeless", "anemic" foods

A Typical Example of a Faddist's Approach

"The individual who is healthy exudes a radiance of love! They are warm and friendly, by nature compassionate, helpful, tranquil industrious and considerate. To be close to this type of person is a joy. Their auric or energy field is comforting and healing. You will never obtain this type of health eating refined sugar. The carbohydrate atom is negative, while the atom of protein is positive."[3]

The above passage is fairly obvious in its fallacies, but people who consume health foods follow the advice of such writers. From the same author there are more insidious claims:

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"Injections of Vitamin B_2 will lower blood sugar, thus helping control the diabetic syndrome. Allowing the diabetic to eat "just anything" and then giving him insulin to keep him alive is an asinine philosophy. Why not give him, instead, a balanced diet of properly formulated vitamins and minerals along with psychotherapy, thereby assuring a more normal health pattern, both physically and mentally?"[4]

This is a more extreme case of faddism; with some writers it would be very difficult for the general public to distinguish fact from fallacy because the facts have some documentation, appear impressive, but then the application is carried to an extreme.

"Health Food" Facts[5]

Molasses, a by-product of sugar refining, is a source of available iron but offers little else. Other sources of iron such as meat, eggs, and green vegetables are just as good, and at the same time are superior sources of other nutrients. There is no substantiation for claims made that blackstrap molasses can cure ulcers, cancer, varicose veins or arthritis.

Rose hips, the seed pods of roses, are a rich source of Vitamin C. There is nothing unique about the Vitamin C from rose hips, and there are cheaper sources such as tomatoes, oranges, broccoli.

Brewers' yeast and *wheat germ* are indeed sources of protein and B vitamins but eating them is not the most appetizing way to obtain these nutrients.

Honey (fructose and glucose) is a good source of energy but otherwise its nutritional value is negligible.

Advantages of "Health Food" Concept

1. The interest in food as a major factor in preserving optimal health is good in itself.
2. Many of the "health diets" underline the disadvantages of over-feeding and the advantage of physical activity, of regular bowel movements and of regular daily rhythm in work and rest.[6]
3. They may stimulate research into possible health dangers.
4. Some of the health foods do no harm and sometimes are good sources of the nutrients claimed e.g. whole wheat bread, whole grain cereals, lentils and legumes.
5. Occasional use of "health food" such as granola or molasses can add variety to the diet.

Disadvantages of "Health Foods"

1. The use of "health foods" can lead to the exclusion of other foods to an unbalanced diet and possible nutritional deficiencies.
2. Some health food faddists take large amounts of vitamin and mineral supplements which may cause vitamin toxicity (Vitamins A & D).
3. By relying on "health food" cures, the individual seeking a cure may delay in getting medical attention until serious damage occurs.
4. Some "health" diets can kill, for example the Zen Buddhist Macrobiotic Diet.[7] (The diet includes a series of numbered dietary regimes, which comprise ever-increasing portions of cereals, with gradual elimination of desserts, fruits, salads, animal foods, and finally even vegetables, so that the highest, Diet 7, consists solely of brown rice.)
5. Cost.
6. Rapid food spoilage and microbial contamination occur more readily in foods without preservative and some processing.

"Health foods" are usually consumed in relation to an overall dietary and philosophical program, frequently vegetarian in conjunction with Hinduism, Buddhism and others. Of the vegetarian diets previously mentioned, the pure vegetarian diet is frequently nutritionally inadequate, being deficient in some essential amino acids, Vitamin B_{12}, calcium, iron and zinc. Fruitarian diets appear to be quite ineffective in supporting growth in children and maintaining adequate nutritional status in adults.[8] Vegetarian diets can be adequate when various food combinations are used providing complementary amino acids e.g. baked beans plus bread. Considerable work has been done on the amino acids of the foods vegetarians eat and acceptable food combinations have been determined.[9]

Food faddists have extremely strong convictions about what they are doing; eating is an emotional and religious experience as well as an everyday function. Concerning vegetarianism, it is suggested that physicians and nutritionists be more sympathetic, that is, to give constructive advice within the framework of the patient's diet rather than criticize the regimen as a whole.[10] Similarly, the "health food" faddist may be most receptive to sound nutrition education within his own frame of reference.

A separate article will discuss vitamins, food refining and food additives. □

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Viral Hepatitis

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Hepatitis due to viral infection is of two types. The first, so-called catarrhal or obstructive jaundice, affecting primarily the young, the inhabitants of mental institutions, camps and the Armed Services, is caused by Virus A (HA). The second type, which has been variously termed serum hepatitis, homologous hepatitis and blood transfusion or syringe transmitted jaundice, is associated with Virus B (HB). The incubation period of Virus A (HA) is approximately 20-30 days, which hepatitis B (HB) is frequently 30-90 days.[1]

Clinically, the two diseases are similar, but some notable differences exist. HA is transmitted mainly by faecal contamination, whilst HB is usually transmitted by blood and not by stools, according to evidence derived from human volunteer feeding experiments. Furthermore, an attack of HA may be prevented by the prophylactic administration of gamma globulin, whereas no such benefit accrues in the case of HB or post blood transfusion jaundice.[1]

Both HA and HB are, however, readily transmitted by human blood and may be harbored in inapparent form by human carriers for years, without evidence of overt jaundice.[1] Neither virus is readily communicable to laboratory animals,[2] or grown in tissue cultures. More recently, it has been claimed that HA is pathogenic to the marmoset monkey and the chimpanzee,[3] and active work is now in progress at the Connaught Laboratories in this field.

Research in infectious hepatitis dates from as far back as 1919 during the Gallipoli and Salonika campaigns of World War I.[4] Subsequently, intensive research was resumed during the Second World War when HA assumed epidemic proportions in the field as it affected British, Allied and American troops in North Africa.[5,6,7] Syringe and blood transmitted HB also created serious difficulties in VD treatment centers at military establishments in North Africa, Italy and elsewhere, where standards of asepsis and antisepsis were of a low order due to lack of adequate facilities.

Despite intensive study, no breakthrough occurred until Blumberg, et al.[8] discovered the existence of an antigen in the blood of an Australian aborigine, which he named Australia antigen (Au Ag).

This serum reacted in an agar-gel diffusion system against sera procured from haemophiliacs who had received multiple transfusions. Later studies revealed that Au Ag might be HB virus itself, on the basis of immunological tests such as Complement Fixation (CF), Radioimmunoassay (RIA)[9], counter immuno electrophoresis (CIEP)[10] and electron microscope studies. CIEP has been recommended as a suitable routine method for screening human blood donors for HB Ag, as well as antibody to hepatitis B virus (HB Ab), until such time as replaced by an equally simple but more sensitive technique. Efforts to develop such a test employing coated red cells for use in an indirect hemagglutination reaction, are now being explored.

Today, no less than three valuable laboratory tests are available for detecting carriers of serum hepatitis virus antigen (HB Ag) and Hepatitis B virus antibody (HB Ab); this constitutes a major advance in laboratory medicine. Unfortunately, at present, there is no laboratory test for Virus A carriers, although the transmission of HA to marmosets and chimpanzees may lead to the development of a test at some future date.[3,11,12,13].

The carrier of viral hepatitis, be it either HA or HB, has created a complex epidemiological situation, such as the need for more extensive serological screening of the population, tests on newborn infants, their mothers, family contacts, and the need for more information concerning the mode of transmission of virus. The protection of healthy persons against infection poses a problem in the absence of specific information pertaining to the mode of spread. The latter is particularly applicable to nurses, doctors, surgeons, anaesthetists, technologists, dentists and many others, who are exposed to virus hepatitis infection in the conduct of their duties.

As little as the prick of a needle has been shown to be sufficient to transfer infection, and so surgical, medical dental and paramedical workers, who are liable to receive jabs, cuts, pricks and abrasions in the performance of their work, are exposed to infection. So far as the patient is concerned, there is, at present, no specific therapy against either HA, which tends to be a self limiting disease in children and young adults in the 15-29 year age group, or HB, which may run a more chronic course.

HB Ag positive blood donors have been shown to contain the subtypes designated Ad and Ay (as well as others). It is of added interest to note that a high incidence of Ay subtype has been reported from Montreal. Research is in progress to determine whether this represents a subtype distribution in Canada unique to the Province of Quebec.

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The patient suffering from viral hepatitis may seek admission to hospital and in so doing, requires laboratory diagnostic services. The HB Ag positive patient also constitutes a potential hazard to hospital staffs. While it is possible to limit tests for HB to patients with a history of drug taking, or syringe sharing, the viruses are no respectors of persons and it is not feasible to narrow the hunt for carriers to particular socio-economic segments of the population. Under the circumstances, it may ultimately be necessary to test all hospital admissions for HB antigen, with the test result transcribed to the patient's chart. Such information would convey a warning to nurses, surgeons, anaesthetists, interns, technologists, interns, technologists and others, to exercise special precautions when administering injections, or giving or withdrawing blood, so as to avoid inoculating themselves.

Recent events at a Biochemical laboratory in Canada, where several technologists developed hepatitis and two of them died, provides a sombre note concerning the risks entailed in the processing of laboratory samples of blood without regard to the danger of acquiring viral hepatitis. The literature is replete with references to the occurrence of HB among patients and staff of haemodialysis units, blood transfusion centres and the like. The possibility of the inhalation of aerosolized blood droplets following the splash of a broken bottle, has also been observed.

The greater the number of drug addicts in a community, the greater will be the carrier rate of HB virus and the need to screen human blood donors. By the same token, earlier legislation, which may have encouraged a more permissive attitude toward the non-medical use of drugs, would exert a heightening of the carrier rate of HB.[14,17]

Insofar as Nova Scotia is concerned, we are fortunate in that the carrier rate of HB is low in the adult population and likewise among blood donors if matched against comparable values for large cities such as Montreal, Toronto, New York or Chicago. According to U.S. Statistics for the two years 1971 and 1972, there were 132,621 reported cases of viral hepatitis,[15] but we must not allow ourselves to become complacent.

Prevention of serum hepatitis in hospitals and laboratories. The WHO Technical Report No. 512 on Viral Hepatitis (1973) has recommended 18 comprehensive measures for hospitals, based on well recognized principles, for the prevention of viral hepatitis in renal dialysis and transplantation units. Every institution should be familiar with these detailed instructions, as they apply to patients, staff, physical plant and blood supplies. They reiterate the need for scrupulous adherence to aseptic and antiseptic principles, with constant monitoring of blood for HB Ag and HB Ab.

Annex 2 of the WHO Technical Report Series No. 512, presents a model code of laboratory practice designed to minimize the risk of acquiring viral hepatitis among laboratory technologists.

These 16 recommendations for laboratories, should be familiar to all hospital laboratory personnel, who should carefully note the danger of infection described in Section I as follows: – "Staff are exposed to the risk of viral hepatitis when handling specimens of blood, plasma, serum, exudates, tissues, faeces, or urine from patients with hepatitis or from patients without clinical hepatitis who are carriers of a hepatitis agent. Specimens from patients with hepatitis B antigen are particularly dangerous and such specimens may be received from maintenance dialysis and transplantation units. Infection is most likely to be contracted by pricking the skin with instruments contaminated with the specimen, or by soiling broken skin with blood. Splashing into the eyes and contamination of the mouth are probably also dangerous and infection contracted by inhalation of fine aerosol droplets cannot be excluded. Aerosols may be produced by the shaking of the specimens, mechanical homogenization, breakages, opening screw-cap bottles, expelling the last drop from a pipette, pouring fluids with drop formation, centrifuging tubes or bottles with wet rims, centrifuging nearly-filled open tubes in an angle-head centrifuge, and the abrupt braking of centrifuges to save time". The remaining 15 sections embrace such aspects as the need for a laboratory safety officer; the use of sodium hypochlorite; 2% activated gluteraldehyde solution; heat and autoclaving of contaminated materials and glassware.

Special attention is devoted to laboratory mishaps which may result in cuts, abrasions and pricks to skin; personal hygiene; the use of protective clothing; care of work places; the receipt of contaminated specimens; risks entailed in pipetting; centrifuging; the use of autoanalysers, high risk specimens submitted from AB Ag + patients; and the disposal of same. Blood banking and haematological techniques such as cross-matching procedures; as well as tissue – typing techniques; all these factors emphasize the magnitude of the complex problems of viral hepatitis.

The Final Report of the Le Dain Commission of Inquiry into the Non-medical Use of Drugs, 1973, has recommended stiff penalties for incorrigible opiate narcotics: punitive legislation such as this may or may not provide the long term solution to the control of drug addiction. It does, however, clearly recognize the menace of drug addiction to the welfare of Canadian youth and the need for remedial action.

The same report contains a reference to British experience re addicts (p. 984) who share syringes and presumably alludes to the danger of acquiring serum hepatitis.

In summary, we would comment that drug users exert an impact on other members of Canadian society by swelling the volume of carriers of HB virus and in so doing introduce a potential threat to the purity of Canadian blood transfusion supplies. At face value, this factor would provide yet another argument in favor of isolating the drug addict,[17] from the main stream of Canadian society, with the aim of curbing the dissemination of HB among civilians. Unfortunately, no such simple solution is possible. Although HB may be designated a communicable disease such

as gonorrhoea, tuberculosis, syphilis, typhoid or the like which are amenable to treatment, HB cannot be handled in this simple manner, because no specific prophylactic remedy or therapy exists.

Members of the public who pride themselves as persons aloof from the woes of the unhappy addict, are sadly misinformed, because none can predict when he or she, may need a blood transfusion as an emergency measure and which subsequently may prove to be icterogenic.

Today, it has become imperative to practice practical preventive medicine, by warning exposed high risk groups such as surgeons, anaesthetists, dentists and nurses, of the dangers of acquiring infection from carriers of HB Ag or HB Ab, in short, it is a national problem. □

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What Is Your Diagnosis?

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Figure 1

A two year old boy with fever, limping for three days, followed by swelling of the right ankle.

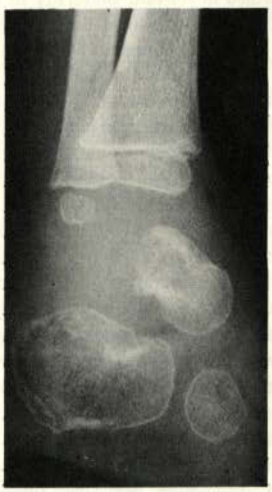

Figure 2

Three weeks later. He has had antibiotic therapy in the interim.

□

(Please turn to page 28 for answers)

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Clinical Pastoral Education

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In 1925, Richard C. Cabot, M.D., noted Boston physician, author, and part-time teacher at Harvard Divinity School published an article in the *Survey Graphic* in which he proposed that something radical be done about the need for better prepared pastors. He suggested that every student for the ministry be given clinical training for pastoral work similar to the clinical training a medical student receives during his internship.

Behind Dr. Cabot's proposal lay not only his medical experience but his acquaintance with the work already begun by Anton T. Boisen, a middle-aged Presbyterian minister who had come through a serious nervous breakdown that had confined him for several months to a mental hospital. Boisen's ancestral family tree was heavy with college teachers and presidents, he himself being a graduate of Indiana University, Yale Forestry School, and Union Theological Seminary. He had also received a Master's degree from Harvard University and had been a sociological investigator for the Presbyterian Department of Country Church Work, doing extensive surveys for the Interchurch World Movement, the collapse of which brought his enterprise to an end and precipitated a nervous breakdown.

Being a genuine scholar, Boisen studied his own case and those of his fellow patients, and, upon his release from hospital, he enroled in Harvard University to study further the problem that had confronted him. There he found a group of men admirably suited to his thinking – Richard Cabot, Macfie Campbell, William MacDougall, and Elwood Worcester – all deeply interested in the vagaries of the mind. With their help he prepared himself for a ministry to the mentally ill and, at the same time, for further researches which would be foundational for more effective training of future ministers. Subsequently, as Chaplain of Worcester State Hospital with its twenty-two hundred mental patients, Boisen demonstrated that a Chaplain giving full time to an intelligent, day-in day-out ministry to mental patients individually and in groups was more effective than the plan in most hospitals of simply having pastors of local churches come in on Sundays to conduct a worship service. In the summer of 1926, he introduced four theological students, one each from Harvard, Boston, Union, and Chicago, as hospital orderlies on the wards who worked overtime reading up psychology, psychiatry, and religion, and discussing their work and their observations with Boisen and the medical staff. Thus began "Clinical Pastoral Education". Annual summer courses continued and still continue, and in many institutions today all the year round training is offered.**

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While Boisen was developing his pioneer work at Worcester, Richard Cabot, supported by a group of distinguished Boston ministers, moved towards the foundation of an organization which would promote and support clinical training, enlisting the co-operation of theological seminaries, doctors and ministers. On January 21, 1930, incorporation papers for the Council for Clinical Training of Theological Students were signed, Philip Guiles being made Executive Secretary and Helen Flanders Dunbar (a pioneer in the field of psychosomatic medicine) the Medical Director.

An important fact needs stressing at this point. The founders made it clear to every student that he must not think of himself as under training to become a psychoanalyst or psychiatrist. That would take years of specialized training in the proper institutions. The Council aimed only at bringing the minister-to-be face to face with human misery in various institutions, and there, under competent supervision, to accomplish three things:

(1) to open the student's eyes to the real problems of men and women and to develop in him methods of observation which would make him competent as an instigator of the forces with which religion has to do and the laws which govern these forces;

(2) to train him in the art of helping people out of trouble and enabling them to find spiritual health;

(3) to bring about a greater degree of mutual understanding among the professional groups which are concerned with the personal problems of human beings.

In spite of these declared aims there were some who felt that the training was too clinical and insufficiently pastoral. They were in general agreement with the principle of learning from the "human documents" prior to academic reflection thereon, but they wanted a different balance of emphases in the training program. Differences of opinion also arose concerning the relative merits of training centered in a mental hospital and training in a general hospital. Other organizations, representing these concerns, arose to sponsor clinical training. Notable were "The Institute of Pastoral Care" and denominational associations set up by the Lutherans and by the Southern Baptists. This had a positive result in spreading clinical pastoral education across the United States, diversifying programs, and

**The 1973 Directory of the Association for Clinical Pastoral Education lists 306 accredited centres in the U.S., 24 in Canada, and 9 overseas. These include General and Psychiatric Hospitals, Penal and Correctional Institutions, and Centres for Juvenile Treatment, Handicapped Children, Geriatric Care, Rehabilitation, Community Mental Health, Inner-City Ministries, and Parish Mission. The Association's address is 475 Riverside Drive, New York, N.Y. 10027, U.S.A.

enriching options. It was against such a background that the Movement spread into Canada, brought into the Maritimes by the Rev. Prof. Charles Taylor of Acadia University who conducted a course in 1951 at the Victoria General Hospital but subsequently concentrated his efforts at the Nova Scotia Sanatorium in Kentville. His pioneer work received substantial impetus with the incorporation by the Nova Scotia Legislature in 1958 of "The Institute of Pastoral Training" (on the Council of which Dalhousie Medical Faculty had and continues to have representation) a body whose efforts presently include the promotion of Clinical Pastoral Education at the Nova Scotia Sanatorium, the Nova Scotia Hospital, the Victoria General Hospital, King's County Hospital, and Springhill Medium Security Correctional Institution.

Clinical Pastoral Education had attracted the interest of theological educators in Canada and Charles Feilding, then Dean of Trinity College, Toronto, led or supported a number of national consultations which led to the founding in 1965 of the Canadian Council for Supervised Pastoral Education. The adjective *supervised* was chosen not to reject *clinical,* or to be different from the Americans, but to provide a description covering a wider variety of training methodologies. Soon after this successful emergence of Clinical Pastoral Education in Canada, the hitherto fragmented movement in the United States achieved unity and tremendous new impetus by amalgamation in 1967 into the "Association for Clinical Pastoral Education" (head office in New York) setting the pace for higher standards, closer relationships with theological seminaries and universities, and taking over the publication of the movement's professional quarterly – "The Journal of Pastoral Care". An extensive literature has also grown out of the movement, some of the more outstanding publications being mentioned in the bibliography at the end of this article.

Having outlined the history, and indicated the prolonged incubation period which together issued in modern clinical pastoral education, now a sophisticated discipline increasingly recognized for course credit towards divinity degrees, it is now time to take a look at the methodology of training. Programs vary from locality to locality, training center to training center, supervisor to supervisor, but certain elements in a certain combination have emerged as characteristic of any program which is certified as meeting the standards set by the Canadian Council for Supervised Pastoral Education. These elements in order of priority, are as follows: –

FIRST. The students face-to-face encounter with another human being who is in a crisis situation. The frequency and intensity of such exposures is gradually stepped up to levels commensurate with that required of other helping professions.

SECOND. The students own retrospective consideration of his encounter culminating in committing to paper a detailed report which gives attention to his own feelings as well as to the implications (sociological, psychological, and theological) of what happened.

THIRD. The student's sharing of his anxieties (so far as he is able) with his fellow students in a peer group, meeting at least every other day. The supervisor is present but his participation growingly confined to facilitating communication. He may occasionally offer interpretations of dynamics which are causing persistent hangups, or share his own feelings if to do so is helpfully relevant and timely.

FOURTH. The student's personal regular encounter with his supervisor during which his pastoral relationships with patients, as evidenced in his reports and supplementary remarks, is the primary focus of the supervisor's concern, but the actual agenda and pace follow the needs expressed by the student.

FIFTH. The student's opportunity to acquire information *relevant to what he is experiencing* from lectures and directed reading.

SIXTH. The student's opportunity to *give* information by presenting a review of his work with one patient (or with several patients suffering from the same illness) together with relevant research reading, at regular clinical seminars.

I would like to make some comments on this methodology to bring out certain points of significance. The reader will have noted that each of the steps which I itemized in the methodology begins with the words "The student". This is not just a literary device. It expresses the fact that the personal and professional development of each individual student is central to the supervisor's task. This is why no staff member is allowed to supervise more than six students for the duration of a course. This is why supervision begins, before the course itself commences, with the careful screening of the applicant, designation of supervisory goals, and an appropriate assignment of chaplaincy responsibility for him to undertake. Furthermore, contrary to much of the rest of the student's education, this methodology starts from the student's experience and moves toward the interpretation of that experience, and its assimilation as consciously understood and helpful learning. In a word the methodology is inductive rather than deductive.

The feelings of the student are given as much attention, sometimes more, than what he thinks or says. This is very important in two ways. First the student is made conscious of his own previously unconscious contribution to the outcome of a pastoral encounter. Secondly the supervisor's understanding handling of the student's feelings is instinctively incorporated as a model for the latter's own pastoral encounter with others.

The priority given to experience and peer discussion over lecturing is in accord with research findings about how people actually learn. What is caught from one's companions sticks more than what is taught from on high! Moreover peer sharing of experiences-in-common engenders a team spirit and habit of co-operative working for lack of which many older clergy today suffer agonies of anxiety

and isolation. The team spirit goes well beyond any sectarian spirit because Clinical Pastoral Education courses normally enrol students of various religious communions and the ecumenical friendships which usually result are lasting and fruitful in the on-going ministry of the Church.

Appropriate use is made in our methodology of audio-visual aids and of role-playing. We are very happy when our clinical seminars can become inter-disciplinary by the presence of doctors, interns, nurses, para-medical staff, etc. Interested professional readers who have access to any of our training centers would readily receive an invitation to attend if they asked for one.

As in all forms of education, the worth and effectiveness of the training depends on the maintenance of high standards and constant self-evaluation. The primary purpose of the national professional organizations is to uphold such standards. Certain requirements must be met before an institution can be accredited for clinical pastoral education. In the process of achieving such accreditation, the visit of an accreditation team is mandatory. Stiff requirements must also be met before a man (or woman) can be approved as a certified supervisor of Clinical Pastoral Education (sometimes referred to by the misnomer-"Chaplain Supervisor"). These requirements include university and seminary graduation, substantial post-graduate clinical training, and periodical oral examinations by duly appointed Accreditation and Certification Committees.

Clinical Pastoral Education is slowly producing a growing number of practitioners of religious ministry who are trained and competent to be part of "the healing team" or to function more effectively in the parishes and congregations of our churches. I must emphasize however that Clinical Pastoral Education is not yet mandatory for all theological students. Some have had it, some have not, and, of those who have, some have had no more than an introductory course. As in other disciplines undergoing rapid change, one of the chief difficulties of Clinical Pastoral Education graduates is the image or stereotype put upon them by members of their own as well as other professions. Even their use of the word "professional" to describe their education is suspect in spite of the opinion of the great majority, and the official standpoint of the movement, that the training is essentially pastoral, preparing men for all kinds of religious ministry, although a clinical methodology in an institutional setting has been found the most propitious for that preparation.

What may the medical practitioner expect of a clinically trained pastor, or to a less extent of a theological student undergoing clinical pastoral education? First of all, he may expect a readiness to cooperate and an above average ability to understand the doctor's efforts in the care of a patient. Secondly he may be assured that the clinically trained pastor is not out to reprimand or proselytize his patient, or to be a "do-gooder" (in the pejorative sense), but to help his patient ventilate his fears, find solace in his religion if he has one, and find meaning and opportunity for personal growth in his experience in so far as he is capable. While doctors may readily see the usefulness of a clinically trained pastor in the care of the dying or the uncooperative patient, they should not overlook the medically beneficial aspects of a reduction of the patient's anxiety in many other situations where death is not anticipated or indeed likely. Furthermore, some doctors have also found significant personal help through consultation with a clinically trained pastor, help which they might just as well have obtained from any wise experienced clergyman, but was easier to seek from a man who could speak some of "the same language". □

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All the above and more are available in the libraries of the University of King's College and the Atlantic School of Theology both in Halifax, Nova Scotia. The author of this article is indebted to Fred Eastman's "The Man and the Movement", *Journal of Pastoral Care* Vol. 5, No. 1, for material on Anton Boisen and the early days of the Clinical Pastoral Education Movement.

What is Your Diagnosis? – ANSWER

The initial radiographs show considerable effusion in the ankle joint without definite bony change. Three weeks later the effusion persists but now the changes of osteomyelitis of the talus are evident.

Medical School: Could We Make it Today?

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There has been such misunderstanding of the admissions policy of the Faculty of Medicine, Dalhousie University, that I feel it would be worthwhile to outline the criteriae by which selections are made.

It is common knowledge that, although there may be a temporary drop in university admissions generally, increasing numbers of talented students are applying for admission to all North American medical schools, and Dalhousie is no exception. Expressed intentions from science entrants at Dalhousie this year, and the expectations of other Canadian medical schools would indicate that this trend will continue.

The Association of Canadian Medical Colleges and other concerned groups have expressed the opinion that Canadian medical schools are now producing enough doctors to meet Canada's needs, and that there is little justification for opening a new medical school, or indeed for maintaining the flow of immigration of foreign medical graduates.

Criteriae for admission to the Faculty of Medicine at Dalhousie are:

I Academic grades throughout the whole premedical educational experience – with special weighting, during the final selection process on (a) matriculation averages (b) marks achieved in the two years immediately preceding application.

II Medical College Admission Test Scores. These have been criticized severely in some quarters – but there is evidence that at least some of the components have validity in predicting success (and presumably survival) in the first two years of medical school.

III Age. Only under exceptional circumstances are applicants over the age of 29 accepted. The reasoning behind this is that (a) later age of graduation would seem to predicate a shorter working life; (b) late choice of this career after trying one or more others may indicate instability; (c) the older individual has already had his chance and to accept him would mean displacing a younger person who has not had a chance; and (d) most senior graduates go into general practise in spite of the fact that their training in other fields eg. engineering, microbiology, etc. would seem to suit them for some specialty in which they could use their former expertise.

IV Recommendations are difficult to evaluate. Those from the home town tend to be invariably glowing, while those from professors, especially in the larger classes, tend to be impersonal and based mainly on marks.

V An interview is not mandatory at present but most Maritime Province applicants are offered, and accept the opportunity to be evaluated by a pair of Third Year medical students. The evaluators are asked to give an opinion on the maturity, stability, suitability for medical studies, and acceptability as a colleague, as well as they can judge in the time available. Should they have reservations about a candidate, the Admissions Committee may well ask the Admissions Officer or a subcommittee to reinterview that particular applicant.

VI Other factors that are taken into account include:
(a) unusual background, e.g. outpost nursing;
(b) evidence of overcoming past handicaps either physical or cultural;
(c) exceptional persistence;
(d) children of alumni;
(e) letter from the applicant indicating his interests both academic and extramural;
(f) health assessment.

There has been criticism for considering the children of alumni on the grounds that medicine is a "closed shop" and that we tend too well to look after our own. On the other hand alumni parents of disappointed applicants have felt at times that this factor was not given sufficient consideration. For the year 1973 of the 18 children of alumni that applied, only seven were accepted.

After the closing date for applications (15 December 1973), the 250 or more bona fide applications from Maritime Province students are carefully screened by the Committee, for the purpose of determining those that are:

1. obviously admissable at this time,
2. those who may be admissable when they complete their prerequisites,
3. those who are obviously not suitable for academic or other reasons.

For the past few years, it has been the policy to let candidates know how they stand as early as possible – so that, if indicated they can make other plans. In the past year, this worked hardship on some students who got the bad news just prior to their spring examinations. However, to keep people dangling until final selection is made seems even more disturbing.

When the spring marks are received from the various colleges that send us applicants, the Admissions Committee goes over all those on the potentially admissable list and tries to select the most desirable students for admission to make up the 87 places allotted to Maritimers. Since some of the accepted candidates do not always take up the offer, a reserve list is prepared from the most acceptable of the remainder. In the past year eleven students were admitted by this means.

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The Faculty of Medicine at Dalhousie exercises one quota only – that of admission of candidates from outside the Maritime Provinces. Like other Canadian Medical Schools, Dalhousie offers places to outsiders up to 10% of the entering class. There were some 300 applicants for these nine places in the class beginning in September 1973.

There is no quota for residents of a particular province, for women, or members of minority groups.

Most of the medical schools in both Canada and the United States are examining their admissions processes at this time. There is widespread dissatisfaction with the current methods, but as yet there is no convincing evidence that any other method would be as efficient.

Some Canadian schools lean heavily on the results of interviewing, but it must be remembered that these applicants have been prescreened for acceptable marks etc. Others have abandoned the consideration of the weighting of data such as recommendations and interviews and admit solely on marks and M.C.A.T. scores.

In Dalhousie, although our first emphasis is on academic excellence – we are quite aware that high marks, particularly in premedical studies, do not predict excellent performance either in preclinical or clinical studies. However, until more accurate predictors are developed, it would seem foolish to discard our present usage, unsatisfactory though it is. □

Brief Note

STREET DRUG ANALYSES AVAILABLE TO PHYSICIANS

Physicians in the Atlantic Provinces can now obtain free analyses of street drugs *obtained from patients whom they are treating.* This is made possible through a federal grant under a program of Research on Drug Abuse from the Non-Medical Use of Drugs Directorate to Dalhousie University.

There have been various reports indicating that the purported drug obtained on the street is actually something else in some cases. The limited number of samples analyzed from the Halifax area support these findings. Therefore, an adverse reaction may be due to such an unexpected drug or to a higher than normal concentration (300 μg LSD v.s. 100 μg).

Samples will be checked for most of the various drugs reported to be sold in the street (single and multiple drugs) and in most cases quantitated. When submitting samples, give as much information as possible, especially what the drug is purported to be, if known; also, some symptoms would be helpful. Physician's name and address should be printed. Patient's name should *not* be given. Prepared forms for submission of samples will be sent on request. At least one dosage unit should be submitted. Smaller samples will be accepted but may not enable complete analysis. Samples should be specifically addressed to Dr. H. A. Ellenberger, Toxicologist, Pathology Institute, 5788 University Ave., Halifax, Nova Scotia. Results will be mailed directly to the physician submitting the sample. It is planned to publish summary reports from time to time in the Bulletin, and/or send them to hospital emergency centres.

In addition, under the same program, samples of urine will be checked qualitatively for street drugs where their presence is suspected. 100 ml of sample should be submitted and labelled for street drug analysis. Marihuana and LSD can not be checked in urine at this time.

If there are any questions, feel free to write or call (902) 424-2820. □

Of Things Remembered

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Having been elevated to Senior Membership I wish to express my thanks to the Medical Society of Nova Scotia, particularly to those responsible for my nomination and to Dr. Douglas Murray who so generously introduced me at the presentation. Among the many kind things he said he mentioned a medical background in the family. This is not by any means always an asset.

Among the most interesting and difficult things about an exercise in memory is the attempt to fix dates for the remembered events. One of these, a pre-school memory, concerned Goldilocks. In those days medical practise was carried on in the doctor's residence and most of the minor surgery was done there. The children of the family were frequently in and out or through the office as the office door provided an additional exit from the house and often a short cut to where you were going.

One cold rainy morning I started through the waiting room when the inner office door opened and a man came out carrying a child whose long golden curls hung down from the arm that supported her limp head and whose still sleeping face was smeared with blood. I followed them out to where a covered buggy was hitched to a post by the office door. She was handed in carefully, the long curls swaying with the wobbly head and the buggy, black and glistening in the rain, drove away. This, I was sure, was Goldilocks.

The following September I started school. My sister took me to the grade one room and when the door opened I saw two things, the sun streaming through the window and the red plants on the sill and in the seat below that were the golden curls. "Goldilocks!" I yelled and dashed across the room to sit in the seat beside her. Close behind me was the teacher. "Come Jamie" she said, "boys and girls don't sit together in school". She took me to a seat across the room. So ended the first lesson. Think what a gynecologist I might have become had I been permitted to follow that early inclination. This was 1908.

Later I found out that she had had what was then called a tonsillectomy. It consisted of slicing off as much of each tonsil as could be made to project through the ring of an instrument called a guillotine. This consisted of a hollow tube about a quarter inch in diameter at the end of which was fixed a hollow ring about an inch and a quarter in diameter which concealed a very sharp semicircular blade attached to strong steel wires which ran down the eight inch hollow tube to be firmly embedded in a metal knob at it's end. A pull on the knob drew the blade across the ring and severed the tissue. Mounted on the back of the instrument was a housing through which ran a rigid metal rod at the forward end of which was a sharp two pronged, barbed fork. A ring at the back end served as a handle to move the fork back and forth through the housing. In use the ring was pressed firmly down on the tonsil, the fork was moved forward to impale the protruding tissue, the blade was drawn through the ring and the instrument removed with the severed tissue on the fork.

Like so many other of the advances in medical science and treatment which are said to outdate medical education in five or ten years, it did more harm than good and was soon given up. The resultant scar tissue led to inadequate drainage and recurrent peritonsillar abscesses. The instrument, however, remained an interesting and almost indestructible plaything for the doctor's children.

The next episode concerned the mangled hand of a mill worker. This was in 1910 according to vehicular dating(we were still using the horse and wagon) and was a warm Spring day. The accident occured in a lumber mill operating in a small village at the foot of a chain of lakes. When we arrived the injured workman was stretched out on the floor of a room which had once been a front parlor. It was completely bare of furnishing and the rest of the down stairs was now used as a mill office. The house itself was too ornate for that area and must have been built for a resident woods boss or mill manager in better days. It had fancy gew-gaws and gingerbread work about roof pitch and eaves and a wide covered verandah ran all around the front and sides of the building.

My father took me in to show me the injured hand. Two fingers were gone and two were attached only by strips of skin. He opened his surgical bag and got things ready to make repairs. "Don't go away boy", he said, "I may want you to hand me something". As he worked I began to feel that I should be somewhere else so I slipped quietly out of the house and lay down on the verandah. After a while I heard my father coming out so I feigned sleep. hoping in that way to escape a scolding. I was something less than a consummate actor for he leaned over, drew the amputated fingers across my face and said, "You should not have done that boy".

At the time I was not greatly distressed by the episode. I knew I deserved some punishment for sneaking away without permission and I thought I got off lightly. It was not until I grew up that I wondered what my father was trying to do by that exercise. Was he trying to introduce me to the practise of medicine early? Or was he trying to turn me away from it altogether? I was seven years old at the time.

He could not have been entirely discouraged by that experiment for the next episode took place at the same mill in mid summer a year later. My father had been called to hold an inquest into the death of an Indian boy who had been killed in a mill accident that morning. It was a hot still

day and the rubber-tired wagon wheels moved silently through the powdery dust of the road (we were still horsedrawn that year) and our animal displayed a sensible inclination to turn off the road to drink at a shady waterhole when one appeared. My father would let him have his head, there being no hurry about an inquest, and he would prolong his waterbreak as long as he dared, sucking in the water noisily then lifting and shaking his head so that drops of water flew about in all directions, then down to drink again. Refreshed and rested he would pull the wagon through the pool and up to the road again and jog along with the water swishing and splashing noisily in his belly.

The last two miles of the journey was up a narrow road that wound along the course of a fast flowing little river that carried the run-off from the lakes through a deep gully the few miles down to salt water. River and road were overhung by tall leafy trees. Over the last mile of the road the gradient increased and as the pressure came on the whiffletree it began to squeak as it moved back and forth with the stride of the horse. The dapple of sun and shade, the gurgle and splash of the river pouring over it's rocky bed, the hum of innumerable insects, the rhythmic squeak squeak of the whiffletree like the beat of a metronome keeping time for a summer symphony, induced a mood of drowsy peace and security unequalled in any other form of transportation.

At the top of the hill the mood rapidly changed. The boy's body was laid out on a table of newly sawn deal supported on trestles. He was small, probably ten or twelve years old and lying in the bright sun of the mill yard his skin was still a rich golden brown. From his mouth protruded a bubble the size of a small grapefruit(which I had not seen at that time) and from each nostril smaller bubbles the size of grapes. These, seen against the deep shadow of the mill housing appeared to be almost translucent and of a pinkish color tinged with saffron yellow. These were still tensely blown up like small rubber balloons and being of the stature I then was they were directly in my line of vision and standing close to the table I could see thin blue lines coursing over the surface of these protrusions, which, having already been told that his body had been squeezed between the drive belt and the big pulley wheel, I thought to be his guts forced out of his nose and mouth.

A coroner's jury was immediately empanelled from among the hushed and sober faced men who stood around the deal table and the inquiry began. I never did understand how the body got between the belt and the wheel but many years later seeing the arms that were drawn into the wringers of washing machines it came clearer.

My father may have been somewhat encouraged by the latter episode for at least I did not run away. The end result of these and similar experiences in my childhood left in me a dread of trauma and traumatic surgery that has troubled me all my life. Others of a different temperament might have gloried in these things but being a doctor's boy was a hardship to me.

I seemed to be logging up a lot of miles in the old wagon in those days and I don't quite know how or why. It's true there was very little for small boys to do in a shire town in those days, particularly in summer. There was no organized sport, not even a proper playing field. The railway station and the wharves were out of bounds, because the tidal river with it's thirty foot rise and fall was an extremely dangerous place for children. That left only the livery stables of which there were three clustered around our house and the blacksmith shop across the street. There is no doubt that my vocabulary was greatly enriched by my dedication to the study of life in those premises. Certainly I rapidly became very facile in a repertoire of oaths and curses the like of which I have never heard anywhere else at home or abroad. It was also interesting the speed and accuracy with which I would slip from the language of the livery stable to the more cultured communication of a home dominated by older sisters and church oriented parents.

Perhaps it was some prescience of the impending departure of the horse and carriage from the world of transportation that drew me so often into the wagon beside my father. Certainly it was not my brilliant conversation, though I was supposed to be a bit of a chatterbox in those days, until at puberty, the black and poisonous tide of the endocrine glands flooded the fragile personality with dark reticence. Nor did my father show any inclination to belabor his captive pupil with tedious dissertations on botany, geology or mathematics. He recognized futility at a glance. One time, seeing a large, white, well kept building a mile or two across the fields I asked what place it was. "That is the poorhouse boy. That's where you'll end if you don't smarten up and work hard."

That and many another lesson in thrifty farm operation caused me in later years to think of those long drives (twenty to forty miles round trip) as the wagon borne school of economics. Certainly the lessons stayed with me and I have worked hard all my life to earn the taxes to build bigger, better and more luxurious poorhouses until, in my old age, I am in some danger of ending my days in one as an escape from the shabby, overpriced premises to which inflation, oppressive taxation and despicable housing policies have brought us.

Not all of these horse drawn journeys were delightful summer odysseys by any means. There were wet, cold and bitter ones as well. Many a trip which began on a warm Spring afternoon turned into a miserable chilly wait on the cold leather upholstery of the wagon seat when some reluctant head backed and filled, backed and filled at the perineum, refusing to enter so cold a world after the sun had set and the stars shone like diamond chips in the dark sky. One had only the frog chorus and the stamping feet of the impatient horse for company. In the winter the horse would have been put in the barn and fed and I would have been in the house, fed a supper of cold meat, homemade bread and butter, preserves and milk, then to the warm

kitchen to drowse and wait for the wailing, impatient, bad tempered cry which marks the emergence of every new human life into the world.

Presently the helpful relative or neighbor would bring the screaming infant to the kitchen and place it in a basket already waiting on a chair pulled up before the open oven door. I would look with sour interest at the ugly red brat, it's face screwed up in a very apogee of temper, doing it's best, it seemed to me, to gouge out it's eyes with it's thumbs.

This appearance, I knew, would soon be followed by the rattle of china cups and the sound of my father's heavy step in the hall, heralding the end of the saga and our imminent departure for home.

These days, observing the changed morals and ethics of the times, one begins to realize that though all men come into this world between a woman's legs, many apparently concentrate much of their thought, planning and energies in the same area and would happily depart this life from the same situation if they could. Some do.

Never having really grown up, they go through life continuing their infantile wail and protest, sucking at the fat breasts of the public purse and blinding themselves with false ideologies instead of thumbs.

In contrast to the intimate scenes of home delivery, the modern hospital case room stirs up a different train of thought. One considers the controversy over the exact time when the developing life can be said to be a human being, as if there was some point before which it might mature into a dog or a horse. Even modest intellectual honesty should admit that it is human at any and every stage. When you observe the speed and skill with which the case room team goes to work to save the life of some new baby that fails to cry or breathe when it is projected into the world, you wonder by what strange alchemy visibility and tangibility make sacred what is inconsequential when hidden in the round house of it's prenatality.

This thought takes one from concern to distress when you observe the almost bestial lack of thought, reason or conscience with which we move from that case room to an operating theatre and there callously put to death an innocent human being, on a possibly trumped up charge of threatening the physical, mental or social well being of it's mother.

The failure of medical men as a group to realize the absurdity of their professional philosophy in this situation, makes one fear for the safety of any and all human life in this disintegrating civilization. For when a learned society accepts the sophistry that there is a period of inconsequentiality in the development of a new human life, it can be led to accept almost any sophism. It was the loss of the sense of common humanity that caused the events leading to the French revolution, it was the break down of reason in the so-called 'age of reason' after the revolution that permitted the mass executions under the guillotine.

Man, apparently has the facility of dissolving the humanity of his enemy with a derogatory name, a demeaning cartoon and a short intensive period of hate propaganda. One is left with the frightful realization that, in spite of the genius of a few and the gentleness of many, even after thousands of years of effort on the part of men of good will, mankind remains a brutal, cruel and vicious animal. His cruel and vicious acts aren't minimized but rather exalted and even justified when carried out in the name of his religion.

I would like to be convinced and sincerely hope that this indictment is a sour, bitter, unchristian and entirely erroneous interpretation of the history and prospects of mankind. One has perhaps misunderstood the slowness of the physical evolution of man and failed even to notice the much slower spiritual evolution, if any. There is perhaps still hope for a gradual upward climb in spite of the many periods of apparent descent into brutality. We acknowledge this hope in these lines:–

Slow Ascent

Intelligence and reason are but flames,
Which for a little moment flare and burn,
To light mankind along his brutal way,
Giving some grace and sweet content to life,
Until some beast emerges crazed with power,
A creature God forgot to set aside
Before his swaggering lust became a flood
Extinguishing the radiant streams of thought,
To flow in darkened currents for an age.
And then once more a spark of genius lights
The lamps of reason, sheltered for a time,
And Man again begins his upward climb. □

The doctor and his leisure

Thoughts on Leisure

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Halifax, N.S.

I recently got a great chuckle out of a cartoon which depicted a father speaking to his son who had just come home with his report card. Said father to son, "You'll have to do a lot better than this, young man, if you expect to develop inner resources to cope with your leisure time when you grow up." The sad truth is that most of us, most of the time, have difficulty enjoying our leisure. Faced with a free hour, a free day, or even an upcoming vacation, many of us scurry about looking for something to do just to fill the empty time. This situation is getting more troublesome as our leisure hours multiply. Indeed, authorities are already predicting that by the 1980's we will be working only four days a week, getting five weeks vacation, and beginning our retirement at age 60. While these figures may apply to the general population, over the next five years medical experts predict more leisure and a better quality of life in store for our profession as well. Although they forecast a shorter work week, we are still not expected to approach the forty hour ideal. Some of the reasons put forth are the use of ancillary personnel, computerization, increase in group practice management, the increased services offered by in-hospital facitities, National Health Schemes, etc. For example: In Quebec, during the first year of government sponsored health insurance, the average doctor worked eight hours less per week. This increase in free time will provide more opportunities for personal fulfillment, but may also create problems of boredom and dissatisfaction. There is a great lack of research to date in planning for a leisure society and this represents a major challenge to the individual, a challenge which will have to be met by everyone in the working society, and certainly not just by physicians.

I would not suggest that we should model ourselves after our American counterparts. However, most of the scanty literature that is available is based on the American culture. The following to me is a rather frightening resume of weekly time allotment for the average American. Note that this includes all occupations and not just physicians. One third of his life is spent sleeping. Of his 113 waking hours per week, 38 hours are spent working and 25 hours are spent with other essentials such as eating, commuting, etc. This leaves 50 hours per week for leisure. Of these 50 hours, 45% is spent watching T.V. and 35% listening to the radio. Newspaper reading occupies 8%, magazine reading 6%, listening to records or tapes 2.6%, movies 0.4%, book reading 0.2%, and 0.1% of the time is spent *witnessing* sports, plays and concerts. Because most M.D.'s work more than 38 hours per week, and hence have even less time than the average citizen for leisure, our problem is compounded. In other words, if we are going to get anything out of our limited leisure hours, then we are going to have to work at it.

Many feel that M.D.'s are not cut out to work a 40 hour week. Some say that the drive that makes one become a physician is not going to let him be satisfied with a nine to five schedule. In other words the Protestant work ethic seems to be paramount for many doctors. Although this is a time honored opinion, many M.D.'s today have other ideas, in particular the younger graduates. For many of them, and indeed for some of the older physicians, more free time has supplanted maximum earnings as their practical goal. There is a growing awareness among physicians of the value of leisure, enjoying families, spending more time with friends, and in general adopting the philosophy that work is not the end-all.

Some of the most recent and interesting literature on leisure has been carried out on that "Bali-Hi" at the end of the road known as retirement. Retirement is a critical period. If you had to retire today, would it live up to your expectations? Retirement is a second career, one which must be prepared for like any other. Education is important for retirement. One must acquire at an early age some of the skills required for the creative and satisfying use of leisure time. Too many people try to develop hobbies, etc., after retirement and soon given them up because they become frustrated; they often are simply too old to master the fundamentals. It is often difficult for retired people to engage in unfamiliar activities and new social relationships. Certainly extending, or modifying previously established patterns that are familiar to the individual and pose less threat of failure, offer a better chance of happiness in retirement. Retirement satisfaction has been found to be higher in individuals who were better adjusted and more efficient at using their leisure time prior to retirement.

Physicians are not the only busy people in this world. It is interesting to look at how some of the men and women in high level management come to be so dynamic, indefatigable, and certainly rarely bored. Often these corporate dynamos put in ten to eighteen hour days, travel all over the country, and yet always seem to look and act alert and fresh. Most researchers feel it is because they have found the ideal mixture of work and play. They have discovered the art of putting things in their proper perspective, and are much better at it than we physicians are. Everyone of these high level executives has an "out" by which he or she recharges his batteries periodically. David Rockefeller of the Chase Manhattan Bank takes his mind

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off international monetary crises by attending and adding to his extensive beetle collection, a hobby he started as a child. Walter Kronkite, the well known T.V. commentator, enjoys escapist reading because he values solitude and introspection. Our colleague, Doctor Denton Cooley, the world famous Houston heart surgeon, gets his kicks out of playing the string bass. All these men live by the adage that pressure is something we create in our minds. Thinking is a good servant, but a bad master. Sport, without a doubt, is one of the reigning fresheners of men at the top of the career ladder. After being mentally exhausted all week, getting tired physically is a most relaxing feeling. Hence we might learn a fair amount about our own physiology from our executive counterparts. Another common feature of these men is their multi-dimensionality. Few of them are narrow in their interests, and many are remarkably well read. Often we, as physicians, fall down in this regard.

How can the busy M.D. make the most of all this leisure time which is coming, and finally look forward to an ecstatic retirement? We must search for a state of satisfaction that will fulfill our individual needs, as distinguished from the primary obligations, routines, and stereotypes imposed by society and our work. Since the wise physician would not think of offering any advice to his colleagues unless asked specifically to do so, we will classify the following merely as suggestions. First of all let us get away from the concept which psychologists call our "self-image." Why must we always feel that it is necessary to be doing something constructive with our free time? The ideal citizen who not only works hard all day, but helps with the Boy Scouts and the local charity, and somehow manages to keep his lawn neat and green is looked upon as being a great guy. Ogden Nash wrote that, "Most people suffer from hardening of the oughteries." With all these "oughts" around us we feel that we should use much of our free time to be responsible citizens. Because our jobs entail a great deal of responsibility, I simply mean that we should not overdo these good works.

Second, honor your childish daydreams, if you like. One of the primary functions of leisure is that it offers the basis for self definition, it is a plea for greater individuality and attention to personal self. So feel free to play with your model airplanes, or go watch a cowboy movie with your kid.

Third, assert yourself. This is very important. One reason we fritter away so much of our free time is that we are too prone to say "yes" to other people. Most of us say "yes" to be agreeable even though we might not want to do something. We get into the habit of acquiescence, and then we turn it into a virtue by calling it good nature. But it is not a virtue: it is a fear of being assertive, a fear of conflict.

Fourth, be active. All guys at the top indulge in some form of regular daily physical activity, whether it is done in the gym, or on the living room carpet.

Fifth, be alone once in awhile. Although some people do not need it, many of us require and thrive on it. What physician doesn't like to get away from people once in awhile?

Sixth, be organized in your daily activities so that you can save precious time which can then be poured into leisure.

Seventh, many people find it very relaxing to get involved in some sort of hobby, but it is important to find one that suits the individual and not one that is more wearing than it is relaxing. Many people choose a hobby as a means of secondary gain, i.e., another source of income during retirement perhaps. Art collecting, or other similar pastimes, can also be an efficient tax dodge. A well founded hobby makes retirement easier.

Eighth, waste time once in awhile. To do anything constructive during the wasting time is absolutely forbidden. Finally, face a certain amount of boredom, because it is inevitable in everyone's life.

Why don't we develop a positive attitude toward our own leisure? It will make us happier people, and possibly better doctors. □

Physician Self-Assessment – ANSWER

Question No.	Correct Answer
407	D

Physician Self - Assessment

Lea C. Steeves, M.D.

Halifax, N.S.

The following questions have been submitted by the Division of Continuing Medical Education, Dalhousie University, and are reprinted from the American College of Physicians **Medical Knowledge Self-Assessment Test No. 1** with the permission of Dr. E. C. Rosenow, Executive Vice-President.

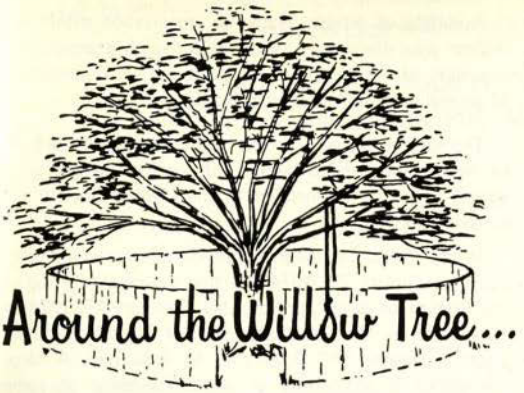
It is our hope that stimulated by these small samplings of self-assessment presented you will wish to purchase a full programme.

DIRECTIONS: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the ONE that is BEST in each case.

407. The "benign" jaundice that occasionally occurs in the third trimester of pregnancy is probably most closely related to

(A) high progesterone level
(B) a specific defect in glucuronide conjugation
(C) auto-immune process
(D) high estrogen level
(E) the common use of diuretics in this stage of pregnancy

(Please turn to page 35 for answers) □



SIC IN TRANSIT

As the 1979 session of the United Nations General Assembly convened, the members rose as one to hear the national anthem of the Assembly's newest member:

"Glace Bay, Sydney, Margaree,
Baddeck, Whycocomagh, Sangaree,
J – U – D – I – Q – U – E
Cape Breton Island
Yes Sirree."

Having called the roll, the President then invited the Ambassador from Cape Breton Island to take the podium.

The Ambassador delivered his speech in his native tongue with simultaneous translation into English, French and the other major languages. Being a native of New Waterford, his dialect is fully understood by probably less than 9,000 people. Some of the delicate nuances were lost in the translation but the general feeling came through.

His Excellency assured the world of the desire of the Capers (as the natives are known) for friendly relations with all peoples. He stated that, in Cape Breton, even enemies are given a friendly approach known as "conditional." This word seems to have a much broader meaning in Cape Breton than elsewhere. In any case, the Ambassador stated that, in international relations, the Capers would take the same approach.

The Ambassador went on to tell the world of some of Cape Breton's contributions. For example, one of their major exports will be deuterium, i.e. heavy water. As you will no doubt recall, His Excellency reminded us, the heavy water industry got off to a very rough start. Glace Bay, the capital of the new nation, was the site of the original heavy water plant scheduled to open in 1966. For years improvements were made in the plant so that now it will soon be ready to produce its first drop of deuterium. He added, of course, that this would be "conditional."

His Excellency then went on to point out a little known fact. That is that C.B.I. is the only developed (well, almost) nation in the world completely independent of outside energy sources. Since a method was found to harness the energy in the air over Whitney Pier, not an ounce of oil has been imported. An attempt was once made to pipe the air to energy-starved Nova Scotia but it kept burning through the pipes.

As any good Ambassador must do, His Excellency then went on to extoll the well-known beauty of Cape Breton Island. He stated that the tourist industry was their greatest and was sure to get even bigger with their new "conditional licence." This latter, now available to all natives, will be issued to every tourist setting foot (or wheel) on the Island. In anticipation of the influx of drivers, especially those unable to enjoy the thrill of motoring in their own states, the renowned Cabot Trail is being converted into a six lane double carnageway. He also stated that there would be De-Tox centres every 10 kilometers. This policy of issuing "conditional" licences to one and all, is known, in Cape Breton, as the Monroe Doctrine, named in honor of a former Mayor of Glace Bay.

In conclusion, his Excellency explained the motto on the flag of this newest of nations. It was felt by many of his fellow citizens that the motto should be in Gaelic. However, it seems that C.B.'s giant neighbour to the west, got upset whenever it heard "the Gaelic," so this was dropped in the interests of world peace. Being of a classical bent they chose instead a Latin motto which best exemplifies the feeling of all Capers on leaving their beloved Island – *Sic in Transit.* □

M.E.B.

Our thanks to the Halifax Herald Ltd. through whose kind permission this cartoon is published here.

Personal Interest Notes

Dr. Harold A. Ratchford was recently honored at a testimonial dinner in recognition of his professional service to the Cheticamp area of Nova Scotia for the past 25 years. He was presented with an engraved silver tray.

Dr. Karen A. Sample, Toronto, formerly of Halifax has been successful in obtaining her Certification in Cardiology. Dr. Sample graduated from Dalhousie Medical School in 1969.

SECTION NEWS

The Section of Surgery Meeting of December 1, 1973 received presentations on:

1. Rupture Diaphragm – Dr. J. J. Quinlan
2. Surgical problems in a non-teaching hospital – Dr. S. V. Anand
3. Fractures of the upper limb – Dr. D. P. Petrie
4. Non-union of fractured tibia – Dr. R. Yabsley

The Meeting elected the following to office:
Dr. J. J. Quinlan – President
Dr. S. V. Anand – Secretary-Tresurer
Dr. G. H. Cook – Vice-President
Dr. D. Nicholson – Member at large
Dr. J. K. Purves – Fee Committee Chairman

Business included discussions of surgical fees and the role of the Section in formulating continuing medical education programs for surgeons in non-teaching hospitals.

The Spring meeting of the Section will be held at the Old Orchard Inn at which time a proposal by Cynamid Limited to sponsor two lectures at a forthcoming meeting will be considered.

The Section for General Practice Executive Committee met on December 8, 1973 with 15 members present. Mr. A. A. Schellinck of the Society attended the afternoon session to participate in the Fee Schedule discussions.

The Executive approved the recommendations of the Standards Committee report on a physician whose practice had been inquired into at the request of the Medical Review Committee and referred to the Medical Society for action. Debate ensued regarding the structure and function of the Standards Committee of the Section for General Practice. The meeting approved a proposal that the Committee itself review this matter and make recommendations to the Executive.

A variety of actions relative to organization within the Section were discussed with the objective of improving the capability of the Section to represent and act on behalf of all general practitioners in Nova Scotia.

The subject of Fee Schedule revisions occupied the bulk of the meeting and a number of specific changes were agreed to and recommended to the Medical Society for consideration.

It was agreed that the Executive Committee would meet again on January 26, 1974 and that a general meeting of the Section be called for Saturday, February 16, 1974 to take place in the Sir Charles Tupper Medical Building, Lecture Theatre "A" 9:00 a.m. to 4:30 p.m. A large attendance is anticipated as numerous items of some significance will be presented to the general membership for discussion and decision.

OBITUARIES

Dr. Thomas B. Murphy, 73, of Antigonish died January 18, 1973. Born at Louisbourg after graduated from St. Francis Xavier University he attended Dalhousie Medical School where he graduated in 1934. He served two terms as president of Maritime Medical Care and received an Honorable Life Membership in the Medical Society in 1942. Our sympathy is extended to his widow and family.

Dr. Eliza Perley Brison, 92, of West Gore, Hants Co., died January 1, 1974. Born at Rawdon, Hants Co., she studied medicine and graduated from Dalhousie University in 1911. The Bulletin extends sincere sympathy to all members of her family. □

HURRY – HURRY – HURRY

Income Tax Relief for 1973

CMARSP is the way to provide for your retirement and at the same time defer up to $4,000 in taxable income if you are self employed.

Your cheque should be in the mail by February 10, 1974. If you have any questions, call the Medical Society office at 423-8166 and speak to Mr. A. A. Schellinck.

[To Members of the Medical Society of Nova Scotia : In view of the advantages of a strong professional organization, kindly make this page available to a non-member associate.]

THE MEDICAL SOCIETY OF NOVA SCOTIA
APPLICATION FOR MEMBERSHIP

NAME .....
Surname Given names

ADDRESS .....

TELEPHONE NUMBER ..... DATE OF BIRTH .....

MEDICAL SCHOOL ..... DATE OF GRADUATION .....

LICENSURE PROVINCE ..... DATE ISSUED .....

OTHER DEGREES .....

POST GRADUATE TRAINING .....

.....

PRESENT TYPE OF PRACTICE .....

SECTIONS: Membership in the Society entitles you to make application for membership in the Section(s) of your choice. Please mark Section(s) you may be interested in.

- ☐ Anaesthesia
- ☐ General Practice
- ☐ Internal Medicine
- ☐ Ophthalmology and Otolaryngology
- ☐ Paediatrics
- ☐ Pathology
- ☐ Psychiatry
- ☐ Residents in Training
- ☐ Radiology
- ☐ Salaried physicians
- ☐ Surgery
- ☐ Urology
- ☐ Obs and Gyn.

ARE YOU A MEMBER OF A BRANCH SOCIETY? ..... WHICH BRANCH SOCIETY? .....

NAMES OF TWO SPONSORING MEMBERS OF THE MEDICAL SOCIETY OF NOVA SCOTIA .....

.....

DATE ..... SIGNATURE .....