The NOVA SCOTIA MEDICAL BULLETIN

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EDITORIAL COMMENT

About the time this copy of the Bulletin reaches your desk, upwards of a thousand family physicians will be gathered together in the Queen Elizabeth Hotel, Montreal, to attend the 4th Annual Scientific Assembly of the College College of General Practice (Medicine) of Canada. Many of these men, all busy practitioners, have come from the far ends of Canada, from as far away as Victoria to the West and St. John's and Halifax to the East. It seems to us a fitting time to take a look at this vigorous young College and ask ourselves what it is that makes membership in the College and the effort of such a trip worthwhile in the face of poor weather and one of the busiest times of year for the General Practitioner.

The answer to this question is not simple and the fact that at present only one out of every three general practitioners in Canada is a member of the College, is evidence that all are not as convinced as we are of the need to belong.

The primary aims of the College of General Practice are twofold, first to promote continuing post-graduate medical education throughout the practising life of its members, and secondly to promote recognized undergraduate teaching at the medical school level by and for general practitioners.

The College is unique in that it demands as a prerequisite of continuing membership a certain number of hours be devoted to formal medical studies each year, and a great deal of its activities are devoted to making this object-

tive readily available for the general practitioner.

Thus we find the College promoting the annual Scientific Convention, refresher courses at medical schools, special short courses either at medical centres or through the use of travelling teams of teachers to those members farther away from centres of medical teaching. It is starting to promote the free use of teaching tapes, discs, and reading material.

In addition there is an increasing number of bursaries and grants made available each year, offering substantial financial assistance to members

wishing to undertake courses of post-graduate study.

In its second objective to promote undergraduate teaching at the medical school level by and for general practitioners, progress has naturally been slower and more cautious since the practice of teaching students in medical schools entirely by specialists has, during this century, become entrenched in our medical educational system. Nevertheless, progress in this direction has been made. A preceptorship programme, mostly at present on a voluntary basis, has been underway in many of the medical schools across Canada and there can be no question that those students who have had the experience of spending one or two weeks' study with a general practitioner in his own surroundings and taking part in the day to day practice of Medicine have been most enthusiastic about the educational value of preceptorship.

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The recognition of the value of general practitioners taking part in certain aspects of out-patient work and teaching, and on discussion panels, has become apparent and perhaps it is not too much to hope that sooner or later the need for the establishment of departments of General Practice in all our

major hospitals will be realized.

The College of General Practice is not a political body but it is vitally concerned with maintaining and improving the quality of general practice in Canada, and thereby enhancing the value and prestige of the Canadian general practitioner. Should any moves be made by government or other bodies to degrade the status of the General Practitioner in the community of Medicine, then surely the College by virtue of its aims and ideals must vigorously oppose such action.

Thus it is that on this occasion of the fourth Annual Scientific Assembly we salute the College of General Practice (Medicine) of Canada. We wish it continued growth in stature and wisdom, and would commend it most heartily to those practitioners of Nova Scotia who have not yet felt the need to belong.

H. C. S.

BOOK REVIEW

THE CHILD IN HOSPITAL BY HEDLEY G. DIMOCK. THE MACMILLAN Co. of Canada, Toronto 1959. 236 pp. Price \$3.75.

This book provides a practical approach to the understanding of the problems of young children admitted to hospitals. It outlines the emotional development and behaviour of the normal child as a background to exploring his reactions to hospitals and hospital personnel. Short case histories illustrate the results of proper and improper management of the young child on

the part of the parent, physician and nurse.

This Canadian author has combined his personal experience with information collected from a very wide review of the literature to produce a most illuminating insight into the problems of hospitalization of the young child that should be read by all physicians and nurses responsible for the care of children. Dr. Dimock has not only presented the problems of hospitalization, but has given valuable advice for the parent, physician, play therapist and nurse on how each may aid in making the child's separation from his parents an experience that he will adjust to before, during and after his stay in hospital. He has emphasized the importance of preparing the child for hospitalization, the necessity of frequent parental visits and the recognition of the signs of "hospitalitis."

The only criticism one might make regarding Dr. Dimock's excellent book is that he has referred frequently to the "pediatrician" when he might well have said "general practitioner" or family physician—the latter still responsible

for the care of most infants and children.

OBSTETRICAL ANAESTHESIA*

A. F. PASQUET, M.D.

Halifax, N. S.

It is not the purpose of this lecture to enter into a discussion of the controversial subject of anaesthesia or analgesia in normal deliveries, when the definite and often divergent opinions of obstetricians and anaesthetists lead to arguments.

I think we all agree that there is a variety of maternal conditions, psychological, anatomical and pathological, which lead to extreme variations

in labour and delivery:

In the uncomplicated case we all agree that true natural childbirth as advocated by Grantly Dick Read is the method of choice, and that, in the more complicated operative deliveries, the most experienced anaesthetist should be present.

Disagreement occurs in the wide range between these two extremes. Just where and when should natural childbirth make way to proper anaesthesia? It is of course a matter for obstetrical decision, but I most emphatically believe that over-supplementing natural childbirth with various analysic and anaesthetic agents by untrained personnel is a most dangerous practice.

In operative obstetrics the anaesthetist has two patients to consider, remembering that whatever affects the mother also affects the much less

resistant foetus.

With the development of the more modern anaesthetic techniques there has been a marked decrease in maternal morbidity and mortality, but strangely enough, this does not apply to the foetus. The proportion of babies that require resuscitation has not been materially reduced and there has been no evidence of a substantial increase in the survival rate of those handicapped by abnormal obstetrical factors or pathological conditions in the mother¹.

Furthermore, survival is not a true criterion on which to assess the effects of anaesthesia on the newborn. There is a relationship between neonatal anoxia and subsequent neuropathology that should not be overlooked². As has been wisely said, "Every cyanotic attack is another nail in the coffin of the

child's intellect."

Thus, here as in all other types of anaesthesia, anoxia is the central factor, the basic cause through which various degrees of permanent damage and sudden death occur. Therefore the primary purpose and aim of obstetrical anaesthesia should be to prevent anoxia before, during and after delivery.

The factors producing foetal and neonatal anoxia can be roughly divided into two groups. (1) Maternal. (2) Anaesthetic. The most important

maternal factors are:

1. PREMATURITY. In premature infants the post-natal rise in arterial oxygen saturation is much slower than normal.³ The pulmonary vascular bed and elastic tissues are poorly developed and the post-natal development of elastic tissue is markedly slower than in delivery at term.⁴ The premature baby often has not the strength to raise fluid secretions from the pulmonary alveoli and so tends to drown in its own secretion. This baby is also more prone to spontaneous cerebral hemorrhage.

^{*}Paper presented at the Short Course in Anaesthesia, Dalhousie University. September 21-24, 1959.

- 2. FOETAL DISTRESS. This condition is due to impairment of foetal circulation in the placenta or in the umbilical cord whatever the actual cause. As this may appear suddenly in all types of complicated and difficult labour it constitutes the most common reason for emergency operative obstetrics. While much argument exists as to the value of increasing the oxygen supply to the mother, McClure⁵ has demonstrated that giving the mother 100% oxygen causes a substantial increase in the partial pressure of oxygen in the blood of the newborn infant. Therefore oxygen in very high concentration should be administered routinely to the mother.
- 3. TOXAEMIA AND DIABETES. In these conditions both immaturity and deterioration of placental circulation may exist. The large size of the baby may result in disproportion and difficult labour.

4. Post-maturity. It is generally accepted that placental degeneration leads to progressive decrease in oxygen saturation of foetal blood.⁶

Therefore when any of the above-mentioned factors are present, the necessity for very special anaesthesia, free of any possibility of producing foetal or neonatal depression and anoxia, is obvious.

The general aims of anaesthesia for operative obstetrics may be listed as follows.8

(A) Concerning the mother.

 To provide as much relief of pain as is consistent with the safety of mother and baby.

2. To provide continuous adequate oxygenation.

3. To involve minimal use of toxic and depressing drugs; such as most general anaesthetic agents, opiates and local anaesthetics.

4. To avoid the production of hypotension and vomiting.

 To avoid disagreeable sequelae, such as headache and neurological disorders following regional anaesthesia, and pulmonary complications following general anaesthesia.

To provide satisfactory conditions for the obstetrician.To provide maximum physical and psychological comfort.

(B) Concerning the child.

1. To guard against any diminution of oxygen supply.

2. To ensure a minimal degree of central depression.

Anaesthesia for operative obstetrics can be divided into two main classes:

1. Regional or conduction anaesthesia.

2. General anaesthesia.

It is obvious that regional anaesthesia best fulfills the above-tabulated aims. If properly carried out, there need be no reduction of oxygen to the foetus, no central depressant action on the foetus by drugs, and no aspiration of vomitus by the mother.

However this type of anaesthesia does have certain drawbacks. The greatest danger is the drop in blood pressure which frequently occurs in the type of patient in whom the height of spinal anaesthesia is difficult to control. However Lull and Hingson found that the blood supply to the foetus is not impaired until the blood pressure falls below 80 mm. Hg., while Hebner found that maternal blood pressures as low as 50 mm. Hg. produced no change in the foetal electrocardiogram. With proper dosage and technique and the use of vasopressors (e.g. Vasoxyl) intravenously, lowering of the blood pressure below

100 mm. Hg. should not occur. However, one must keep in mind that if vasopressors are used, subsequent administration of ergometrine intravenously may produce a violent rise in blood pressure. If the spinal anaesthesia rises to T 3 or 4 there may be some impairment of respiratory function. Oxygen should therefore be administered as soon as the spinal anaesthetic has been given.

Another possible disadvantage is the definite increase in uterine tone following spinal anaesthesia, which, it is claimed, reduces the flow of blood through the placental site. This was disproved by Clayton.¹¹ Nevertheless Crawford⁸ lists the following as contraindications to spinal anaesthesia.

(a) Vaginal haemorrhage associated with either placenta praevia or toxaemia of pregnancy.

(b) Prolapsed cord following premature rupture of membranes.

(c) Apparent foetal distress.

These arguments apply to both spinal and epidural anaesthesia, less to caudal anaesthesia and of course not at all to local. 12

My personal feelings on the matter is that regional anaesthesia has definite advantages for the baby, but that the above-mentioned objections should be kept in mind; and further, that spinal anaesthesia should never be administered to a patient who definitely objects to it.

In elective Caesarian sections the following technique of administration is used:

Atropine premedication, usually gr. 1/150, is given to prevent bradycardia and to enable the rapid administration of a general anaesthetic if it becomes necessary.

The blood pressure is checked so that any subsequent change will be

accurately estimated.

A secure intravenous infusion is started and the patient is turned on her side. She lies in a flexed position, but only such a degree of flexion as is com-

fortable to her is required.

The table is tilted head-up to 5-10 degrees. Lumbar puncture is performed, and is usually easy in obstetrical patients. 12 mg. of Pontocaine (1.2 cc) mixed with 1.8 cc of 10% dextrose is injected following a contraction (if the patient is in labour). She is then turned to the supine position, the table is changed to the horizontal and a thick pillow is placed under the head and top of shoulders. The blood pressure is checked frequently. Oxygen is given by mask. The height of analgaesia is checked by testing the level at which skin sensation diminishes and, if desired, it can be heightened by tilting the table, head down 5-10 degrees for short periods. The level of anaesthesia can be changed by this manoeuvre, if performed within 10 minutes of injecting the spinal drugs. Intercostal muscle function is checked by asking the patient to take deep breaths and observing the movement of the thorax.

If the blood pressure drops below 100 mm. Hg., Vasoxyl 0.5 mgm is given intravenously and repeated if necessary. In hypertensive patients, it may be inadvisable to allow the pressure to drop so low, and there can be no definite rule, but lowering the blood pressure by more than 30-40 mm. Hg. should

probably not be allowed.

The patient is warned of the sensations she should expect, and in most cases with a bit of well-applied psychological reassurance by a sympathetic anaesthetist, she is delighted to hear the first wonderful cry from her offspring.

In a similar manner, with smaller doses of anaesthetic agent (7-8 mg. Pontocaine) and by maintaining a more head up position, lower spinal anaesthesia can be administered for forceps deliveries, etc.

However, as shown above, regional anaesthesia may not be suitable for all cases. With modern methods there are no absolute contraindications to general anaesthesia, provided one is fully aware that whatever depresses the mother also depresses the infant. With the judicious use of modern agents and techniques, general anaesthesia can be administered in such a manner that neonatal depression is not significantly increased.

Curare appears to be the only drug to which the placenta acts as a partial barrier.

Ether and chloroform are most efficient agents for producing relaxation, but they cause marked and often prolonged depression in the newborn.

Cyclopropane is an extremely versatile and potent agent. recovery are rapid, nausea is less than with ether. Respiratory depression is marked in both mother and infant, and, although not prolonged, it frequently results in severe neonatal depression. A high concentration of oxygen is present, but it necessitates the use of a closed circuit system which is contraindicated if the patient has received Trilene earlier during labour and it may cause cardiac complications in the presence of high circulating pitressin levels.

Fluothane may be a very useful agent 15, 16. Induction is rapid and uterine relaxation marked, but there is danger of cardio-vascular disturbances, including hypotension, and the uterine flaccidity is so marked that the danger of post-partum hemorrhage is increased.

All volatile and gaseous anaesthetic agents depress maternal and foetal respiration with the possible exception of nitrous oxide and ethylene. These produce no significant depression and are rapidly eliminated from the mother and the foetus. However, these agents must be considered as analgesics rather than anaesthetics. The concentration required to produce true anaesthesia would result in anoxia and this cannot be tolerated. If used as analgesics in a concentration not greater than 75-80% they are most useful in all types of deliveries.

A balanced anaesthesia with pentothal induction has been found most satisfactory. While pentothal is a strong respiratory depressant, the depression is of extremely short duration if a dose of 250 mg. is not exceeded. 13 produces a rapid and quiet induction without the respiratory obstruction and attendant anoxia which is so harmful to the baby. Anaesthesia can then be maintained with minimal amounts of other agents such as cyclopropane, Trilene and relaxants.

The technique I favour is that of rapid pentothal induction (usually 150 mg.) followed immediately by the intravenous administration of a rapidly acting muscle relaxant such as Anectine which is so rapidly eliminated that foetal relaxation is not observed if only 20 mg. of the drug is given at a time. This may be repeated if delivery is prolonged.

Controlled hyperventilation, either by face mask or by intubation, is maintained with N20 and O₂(30%) (e.g. N.O. 4 litres per minute and O₂ 2 litres per minute) and with the CO₂ absorber turned off to prevent lowering the blood CO2 to apnoeic levels.

This technique provides a smooth very light plane of anaesthesia with

minimal or no neonatal depression.

If administered for difficult vaginal deliveries, this technique is most satisfactory, especially if the obstetrician performs a good pudendal block.

Wherever general anaesthesia is used, vomiting and aspiration of vomitus is a constant threat. To prevent the latter some advocate prompt intubation. This however is not fool-proof as the patient may vomit following extubation and readily aspirate vomitus through partially paralysed vocal cords.

If time and conditions permit, the safest method is to empty the stomach before induction of anaesthesia. Holmes14 recommends the use of apomorphine, 3 mg, mixed with 10 cc. of water given slowly intravenously until the patient becomes nauseated and empties her stomach. Usually only 1.2-1.5 mg. apomorphine is needed. Atropine gr. 1/150 is then given intravenously

to prevent the mild vagal-stimulating effect of apomorphine.

Despite all precautions, aspiration of regurgitated acid material is always a menace to the mother's well-being. One of the most important methods of treatment is constant watchfulness and proper posturing of the patient. This is particularly important following delivery at which time the patient should be turned on her side. With the N2 O and O2 anaesthesia technique described above the patient is usually well awake by the time she leaves the anaesthetist's care.

The subject of obstetrical anaesthesia is a vast and complicated one. No anaesthesia so far developed gives all the answers to the many problems. The ideal would be some anaesthetic that would produce light sleep in the mother without affecting the baby, in short, some anaesthetic agent that would not cross the placental barrier. In the meantime we probably achieve the best results by giving—especially after long drawn out labour—the anaesthetic that least affects the baby. The most important factor in providing this and in attaining the ultimate ideal, is full understanding and co-operation between obstetrician and anaesthetist.

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THE EARLY DETECTION OF HUMAN CANCER*

DONALD F. SMITH, M.D.

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The Scientific Sessions of the American Cancer Society were held in New York City October 26 and October 27, 1959. Dr. Norman H. Gosse, Director of the Nova Scotia Tumour Clinic asked the Nova Scotia Chapter of the College of General Practice of Canada to appoint a member to attend this meeting entitled "A Symposium on Evaluation of Early Diagnosis of Cancer." The symposium dealt with the evaluation of early diagnosis of cancer, the responsibility of the practising physician, the economics of cancer detection, the value of periodic examination in detection of cancer in various sites, precancerous lesions and their treatment and the treatment of early cancer of the various sites.

In his opening remarks Dr. Eugene Pendergass, (President of the American Cancer Society and Professor of Radiology at the University of Pennsylvania) stated that early cancers were missed in the specialty clinics of the University Hospital when attendance at these clinics was allowed before complete physical examination was done. This has since been corrected at this institution.

According to Dr. H. L. Kottmeier, (Chief, Gynecological Section Radium-hemmet, Stockholm, Sweden) the main problem before the meeting was the ubiquity of early malignant disease. Cancer must always be kept in mind when doing general periodic health examinations. Every doctor's office, either that of a general practitioner or a specialist, should be a cancer detection clinic. The practising physician must have a high index of suspicion in order to play an effective role in cancer detection. The diagnosis of a beginning cancer at the earliest possible date separates the astute and probing physician from the "Let's wait and see what happens" doctor. The three qualities in or services by the physician most likely to produce improved survival rates among patients with cancer are constant suspicion, thorough examination and complete history and early diagnosis. One in four Americans will develop cancer at some time in their lives if present rates continue. The opportunity for cure or prolongation of life of the cancer patient usually lies in the hands of the first physician he sees.

Office or clinic cancer detection was stressed at the Symposium. Dr. Emerson Day (New York) reported that the cancer yield at the Strang Cancer Prevention Clinic, on first examination without selection, is 8 per 1000 for women and 6 per 1000 for men. He believes that such an examination is both practical and essential for private and clinic patients 40 years of age and over.

In the absence of single reliable screening test, effective cancer detection depends upon thorough examination of individual patients for the first sign of disease, utilizing all clinical methods. In large part these methods are practical for use in the doctor's office. The routine examination of apparently well individuals serves to bring them to medical attention weeks or months before they would otherwise have sought it.

Head and Neck. This site accounts for 4.6 per cent of cancer incidence. Under this anatomical heading are such important cancer sites as the oral

^{*}Presented at the monthly meeting of the Halifax Medical Society, Camp Hill Hospital, January 13, 1960.

cavity, pharynx, larynx and thyroid as well as the skin of this region. The risk of developing cancer of the oral cavity is three times as great for the heavy smoker and one and half times as great for the average smoker as for the person who smokes little or not at all. The risk of developing cancer of the oral cavity is ten times as great for the heavy drinker (over six ounces of whiskey or its equivalent) as for the average user or non-drinker. Other selective factors in the development of head and neck cancer are syphilis, exposure to sun and elements, and radiation therapy. The main method of detection of cancer of the head and neck is careful clinical examination emphasizing inspection and palpation. An awareness of the importance of the environmental factors noted above directs clinical suspicion.

Lung. Bronchogenic malignancies make up 7.5 per cent of cancer incidence. New York State (exclusive of New York City) reports a six hundred and eighty-seven per cent increase in male lung cancer mortality over the past twenty-five years. The risk of developing lung cancer is sixty to seventy times as great for the heavy cigarette smoker as for the non-smoker. It is estimated that one in eight heavy smokers will develop lung cancer contrasted to one in

three hundred in the non-smoking population.

Cytologic examination of sputum or bronchial washings by Papinacolaou technique is now established as a reliable means of diagnosing lung cancer. When three satisfactory 'deep-cough' sputum specimens are provided for examination ninety per cent of lung cancer can be diagnosed by this relatively simple means.² Periodic chest X-ray examination of the high-risk adult, identified by evaluation of their smoking, occupational and residence patterns, still remains the principle method available for the detection of lung cancer. Periodic cytologic examination of the sputum of selected individuals from this group is under study.

Breast. Lesions of this site are responsible for 10.7 per cent of cancer incidence and 21.3 per cent of female cancer incidence. The incidence of breast cancer among single women is higher than among those who are married. The risk of developing breast cancer in women appears to decrease somewhat in proportion to the number of pregnancies. In addition nursing appears to decrease the chance of development of breast cancer. Periodic physical examination supplemented by personal examination of this surface organ at monthly intervals is an effective means of discovering small, and presumably early

cancers.

Any persistent mass in the breast even though it appears clinically benign, merits excisional biopsy. Roughly ten per cent of these foci of "cystic mastitis" will proved to be early cancer.

Stomach. Gastric malignancy accounts for 5.6 pe reent of cancer incidence. The silent interval of gastric cancer is about two years. We still lack a satisfactory screening test for gastric cancer. A useful test is the estimation of gastric acidity under the stimulation of histamine. Patients with achlor-hydria or hypochlorhydria (under thirty per cent free HCL) should have yearly X-ray examination of the stomach. Tubeless gastric analysis appears to overcome most of the obstacles posed by the intubation method and seems adaptable to large survey work. In this test a resin compound, (obtainable as 'Diagnex Blue' from Squibb and Company) is taken orally and causes the release of dye, in the presence of measurable gastric acid, which is detectable in the urine. The utilization of the guaiac test for occult blood in the stool may direct attention to the presence of a gastric cancer.

Uterus. These cancers make up 9.1 per cent of cancer incidence; 17.8 per cent of female cancer incidence. Cytological examination of vaginal and cervical secretions in the best cancer detection method yet developed for any body site. In about two thirds of the cases of pre-invasive carcinoma, the conventional examination was negative and the diagnosis was made on cytologic study alone. The combination of vaginal and cervical smear is most productive since the vaginal pool is more likely to contain exfoliated cells from the endometrium. Women who are married and have children at an early age and women with uncircumcised husbands have a higher incidence of cervical cancer. Cytology is recommended routinely on all gynecological patients and on obstetrical patients during the prenatal visits and at the follow-up examination at six weeks. Dr. Leona Baumgartner (Commissioner of Health, City of New York) stated that in the Harlem hospital this program obtained a cancer yield of 1.2%.

Experts recommend the routine use of the Schiller test using Gram's stain (1 part of iodine, 2 parts of potassium iodide to 300 parts of water) or 3.5 per cent tincture of iodine to paint suspicious areas of the cervix. Areas of the cervix which fail to take the stain should have multiple biopsies. Approximately ten per cent of the Schiller-positive areas will be due to cancer. Genito-Urinary Tract. In this site is found 6.6 per cent of cancer incidence and 13.2 per cent male cancer incidence. Examination of the external genitalia, microscopic examination of the urinary sediment and rectal examination are part of the complete examination. As routine office procedures they are neglected or imperfectly done. These routine office procedures can and do detect early cancer of the genito-urinary tract. Any hydrococcle in the adult should be excised as it may be masking a tumour. All tumours of the testes can be considered malignant. Dr. Roger Baker (Department of Urology, Georgetown University School of Medicine) suggested that any atrophied undescended testis should also be removed as it may be a source of future malignancy. Cancer of the prostate can be diagnosed by the index finger in 90 per cent of cases, thus periodic rectal examination of males over 40 is recommended. Microscopic or macroscopic hematuria should be considered symptoms demanding complete urological investigation including cystoscopic examination.

The Skin. These lesions make up 13.6 per cent of cancer incidence. Fair skinned individuals with a sandy or freekled complexion seem to be more prone to these lesions. Particular attention should be paid to nevi situated on the palm of the hand, sole of the foot, in the regions of genitalia or in areas subject to chronic irritation. Increase in size, change in color or tendency to bleed are indications for immediate removal. Simple inspection of the skin by the examining physician remains the only method available for the detection of skin melanoma and their precursors.

The Anus, Rectum and Colon. The large bowel provided 13.1 per cent of cancer incidence. Adenocarcinoma constitutes approximately 90 per cent of all cancers in this region. The detection and removal of adenomata is sound cancer prevention in this area. Furthermore when adenocarcinoma is found and treated in the early stage, a high cure rate can be anticipated. Inspection of the perianal skin is an important initial step. Squamous carcinoma and melanoma are the principal lesions found here. The efficacy of digital examination in the detection of adenomas and adenocarcinomas has been highly overrated in the literature. In a series of 125 carcinomas of the rectum and colon detected, only 13.5 per cent were found by digital examination. Seven

out of eight cancers would have been missed if reliance had been placed on digital examination alone. Proctosigmoidoscopy is the most important procedure in the examination of the rectum and colon. Two-thirds of large bowel cancers and ninety per cent of large bowel adenomata originate in the terminal 25 cm. of the tract and are within reach of the sigmoidoscope. 1 Approximately eighty per cent of the lesions found are discovered by endoscopy alone. Blood and mucus are sometimes seen, (particularly after strong catharsis) at the upper limits of the endoscopic field without a visible bleeding source. These findings indicate the presence of a tumor, diverticulitis or segmental colitis above the level of the sigmoidoscope. A barium enema will usually establish the diagnosis though it will be difficult to rule out adenocarcinoma in the presence of diverticulitis. Cytological examination of colon contents will often prove of value in detecting neoplasms in these instances. Whenever mucosal hyperplasia adenoma or adenocarcinoma is found, a barium enema with air contrast is performed to rule out the possibility of additional lesions above the sigmoidoscopic field.

Biopsy should be from the summit of the lesion, as this is the most representative area and least likely to bleed. Lesions of less than eight to ten millimeters are not biopsied but left for total removal. A satisfactory "follow-up" program for new lesions in these patients consist of a annual sigmoidos-

copy and a barium enema with air contrast every other year.

Leukemia and Lymphomata. These cancers of the blood and lymphatic tissue make up 6.9 per cent of cancer incidence. Any individual or groups of individuals who had a history of above average radiation exposure should be screened carefully and periodically for the presence of leukemia. A clinical examination, determination of hemoglobin, total white cell count and differential smear plus routine chest X-ray examinations are the best methods for the detection of the diseases of leukemia-lymphoma group. More knowledge is needed regarding the etiology, or at least the epidemiology, of this group to permit better screening methods to be developed. Selective factors must be identified before methods of prevention can be proposed.

Other Sites. The foregoing sections have dealt with body sites that account for approximately seventy-five per cent of the cancer mortality and eighty-five percent of the cancer incidence of a typical year in the United States.¹ The remaining cancer arises in such sites as the pancreas, ovary, central nervous system, bone, esophagus, small bowel, liver, biliary tracts and soft tissues. It is fortunate that many of these are relatively rare, since they carry a high mortality and do not usually lend themselves to ordinary detection procedures.

SUMMARY

From the standpoint of a private practitioner, the diagnosis of cancer of the accessible sites is possible in over ninety per cent of cases by methods readily available in his private office.¹ These are:

1. Complete history and physical examination including procto-

sigmoidoscopy.

2. Simple laboratory studies such as hemoglobin, white blood cell count and differential smear, urine analysis, chest X-ray examination and vaginal and cervical smears. This emphasizes the key role which can be played in cancer detection by a private physician in every day practice.

The author, as a family physician, attended a symposium on cancer detection at the Scientific Sessions of the American Cancer Society. following impressions summarized the recommendations of the panel:

All physicians, in every way possible, should advocate the abolition of cigarette smoking. Personal example should be the physician's initial con-

tribution.

The routine performance of Papinacolaou smears on all gynecological

and obstetrical patients is a practical office procedure.

Proctosigmoidoscopy should become a routine office procedure in general examinations. The half inch diameter proctosigmoidoscope is as efficient as the larger instrument and spares the patient unnecessary discomfort.

The prophylactic removal of all naevi on palm of the hands sole of feet

and on genitalia is recommended.

All breast "lumps" should be immediately excised or biopsied.

A normal intravenous pyelogram does not rule out genito-urinary cancer. The findings of a few red blood cells on urinalysis warrants a complete urological investigation with cystoscopic examination. All hydrocoeles in adults should be excised. Yearly rectal examination on all men over 40 years of age is advocated.

Routine circumcision of the male new-born is recommended. (7)

Any suggestive symptom should be completely investigated to exclude the presence of an early cancer.

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NEEDLE BIOPSY OF THE PARIETAL PLEURA*

S. J. SHANE, M.D.

Halifax, N.S.

During the past 5 years there has been a sharp increase in the amount of study devoted to biopsy methods in the diagnosis of intrathoracic disease, both pulmonary and pleural. In this presentation, I shall not dwell upon such techniques as have been devised for the anatomic diagnosis of disseminated intrapulmonary disease, but shall confine myself to a discussion of biopsy procedures in diseases of the pleura in general, and needle biopsy of the parietal pleura in particular. It is hardly necessary to enumerate the advantages of such techniques, but it should be emphasized that they find their place chiefly in the diagnosis of tuberculosis and malignancy, and to a lesser extent, in the elucidation of miscellaneous pleural diseases. It should also be emphasized that the diagnostic problem in all these situations has to do with the determination of the etiology of a pleural effusion.

With respect to tuberculosis, it will be generally agreed that the overwhelming proportion of tuberculous pleural effusions will not reveal tubercle bacilli on direct smear or on concentrate. To wait for cultures involves a delay to 6 to 12 weeks, during which period, treatment, if undertaken, would be on a purely empirical basis. If, however, an early etiologic diagnosis could be made by a biopsy procedure, involving only a few days' delay in reporting, the interests of most patients would be much better served than has been

the case in the past.

With regard to malignancy, it is clear that a positive pleural biopsy would indicate spread of an adjacent neoplasm to the pleura, and would thus denote inoperability. The use of such biopsy techniques in malignancy would, therefore, be of threefold value. It would provide an accurate anatomic diagnosis, spare the patient an unnecessary operation, and enable treatment to be begun by such methods as external radiation, radioactive gold or nitrogen mustard.

In the case of miscellaneous forms of pleural disease, such as residual haemothorax, non-specific fibrosis, non-tuberculous empyema, etc., it will be understood that biopsy procedures of this nature should help guide treatment along the course prescribed by adequate and accurate diagnosis.

During the past few years, several groups of workers have done a great deal of pioneer work in connection with pleural biopsy. In 1954, Sutliff, Hughes and Rice¹ performed thoracotomy with open pleural biopsy in 21 patients with pleural effusion. In 17, granulomatous disease of the pleura was found, compatible with a diagnosis of tuberculosis. In 3, there was neoplastic invasion of the pleura; and the biopsy findings in the remaining case were those of North American blastomycosis. In July, 1955, Small and Landman² reported their results in 5 cases in which tissue for biopsy had been obtained, also by open thoracotomy. In all these, a clinical diagnosis of tuberculous pleurisy with effusion had been made, but it had been impossible to establish the diagnosis unequivocally by bacteriologic methods. This they were able to do in all 5 cases by pleural biopsy. In October, 1956, Breckler and his co-workers³ reported their experiences with the procedure of open thoracotomy and pleural biopsy in 16 patients with pleural effusions

^{*}Read at the Annual Meeting of the Canadian Thoracic Society, Halifax, Nova Scotia, June 3rd, 1959.

or a blunted costophrenic angle. In 9 of 10 cases in which tuberculosis was suspected, it was corroborated by histologic evidence. The remainder of the 16 cases consisted of 2 intrathoracic neoplasms, 2 cases of streptococcal pneu-

monia, 1 residual haemothorax and 1 case of collagen disease.

At about the same time, other workers were searching for methods which would render open thoracotomy unnecessary and, in 1955, DeFrancis, Klosk and Albano4 described their technique of needle biopsy of the parietal pleura in the presence of pleural effusions, using the Vim-Silverman needle. No figures were provided to indicate the value of this procedure. A year later, Heller, Kellow and Chomet⁵, using DeFrancis' technique, presented their results in 22 needle biopsies of the parietal pleura in 20 patients. Briefly, 5 cases were reported as showing "caseating granuloma", presumably tuberculosis; 4 were malignant neoplasms; 9 biopsies were reported as revealing "non-specific fibrosis"; and in 2 cases, the specimen was "inadequate for diagnosis". In 1957, Donahoe and his co-workers in Washington, D.C., reported their results in 45 "aspiration biopsies" in the same number of patients. They used the Vim-Silverman needle in a modification of DeFrancis' technique and found that they were able to diagnose tuberculosis in 83% of cases in which it was suspected and malignancy in 50% of cases in which it was suspected, while their biopsies were non-diagnostic in 45% of cases. It is interesting to note that the tissue they obtained was "inadequate for diagnosis" in 27% of all biopsies. In 1956, Samuels and his group in Texas reported a similar study, using the same technique, with the rather interesting specific feature that, in all patients in whom biopsies were performed, malignancy was suspected. In this series, accurate diagnosis was possible by needle biopsy in 50% of cases, while 50% were non-diagnostic and there were no reports of "tissue inadequate for diagnosis".

During the past two years, there has been a shift of interest in the direction of specially-designed needles, partaking more of the characteristics of a "punch" than of those of a needle. It is, therefore, possible that more recently devised methods of obtaining sections of parietal pleura for examination should be described as "punch biopsy" rather than "needle biopsy". In June, 1958, Cope⁸ in the Journal of the American Medical Association described a new pleural biopsy needle (or punch) and, without quoting any diagnoses or actual figures, indicated that it had been used in 10 patients

without morbidity.

By far the most extensive study along these lines has been that of Mestitz, Purves and Pollard, reported in the Lancet of 27 December 1958. These workers used a needle or punch (Figure 1), described by Abrams, in the same Journal (Lancet) about 10 months earlier. They designated their procedure as "blind punch biopsy" and it was carried out in 200 patients in whom 228 biopsies were performed. Briefly, they stated that they could establish an accurate anatomic diagnosis in 80% of tuberculous effusions and 60% of malignant effusions. An important feature of this piece of equipment was that, if necessary, it could be used in the absence of a pleural effusion, but that, if desired, it could be used as an aspirating needle to remove an effusion and, following this, a specimen of the parietal pleura could be taken for biopsy, employing the same instrument.

My own interest in this subject began in 1955, stimulated by DeFrancis' paper in the New England Journal of Medicine and, early in 1956, at Point Edward Hospital, we began to do needle biopsies of the parietal pleura by his

technique, using the Vim-Silverman needle. Because this needle is readily available, and because the technique is extremely detailed and meticulous, I should like to describe it carefully and illustrate it with Figures 2-6.

The biopsy site is prepared with any suitable coloured surface antiseptic and local anaesthesia, based on individual preference, is used and carried down to the pleura. It is important to make a small skin incision at the biopsy site, in order that manipulation of the cannula will not be restricted by the skin edges. As shown in the first slide, a 17 gauge needle, to which a 50 cc. syringe has been attached, is inserted into the appropriate interspace, and constant traction is applied on the plunger of the syringe while the needle is advanced. As soon as fluid is withdrawn, the appropriate distance of the tip from the skin is marked off on the needle by attaching a Kelly clamp to the shaft of the needle adjacent to the skin (Fig. 2). The needle is then withdrawn, and the distance from the Kelly clamp to the tip of the needle is measured off on the Vim-Silverman needle, with the biopsy shaft inserted The Kelly clamp is then applied to the Vim-Silverman needle, marking off this distance. The biopsy shaft is then withdrawn from the needle and the obturator is inserted. The needle, containing the obturator, as shown in Figs. 3 and 4, is advanced through the skin incision to the distance marked off by the clamp. The obturator is then removed and the biopsy shaft is now re-inserted, as shown in Fig. 5. It is clear from the diagram that the biopsy shaft now encompasses the whole thickness of the parietal pleura, as well as the more peripheral layers of the chest wall. The outer needle is now carried forward approximately 2 cm. while the biopsy shaft is held in place. This, of course, closes the biopsy shaft tightly about the specimen of parietal pleura. Both portions of the needle are now rotated through 360° to cut off the specimen of pleura, and they are then withdrawn The final illustration of this series (Fig. 6) depicts the outer needle which has been "sleeved" forward and shows both needles being rotated.

Our own study, using this technique, extends from March, 1956, and includes needle biopsies of the parietal pleura carried out at Point Edward Hospital, the Halifax Tuberculosis Hospital and the Victoria General Hospital. The results are those of 38 biopsies performed on 33 patients and, very briefly, are as follows (see Table I)—

Table I Results of 38 Needle Biopsies of the Parietal Pleura Performed on 33 Patients

A.	Anatomic findings compatible with tuberculosis	5
В.	Anatomic findings compatible with malignancy	6
C.	Non-specific chronic inflammation or fibrosis	7
D.	Special findings such as presence of lung tissue	
	with consolidation, chronic emphyema, etc	4
E.	Normal pleura	5
F.	No pleura present in specimen	8
G.	Pleura present but specimen otherwise inadequate	
	for diagnosis	3
	TOTAL	38

Before going into detail regarding these individual findings and discussing their significance in relation to previous studies along the same lines,

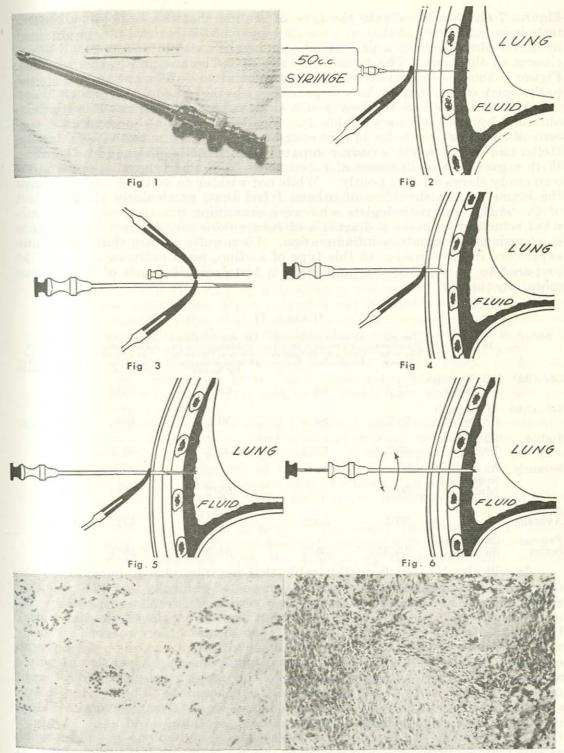


Fig 7

Fig. 8

Figures 7 and 8 will indicate the type of section that can be obtained by this technique. Figure 7 is that of a needle biopsy of the parietal pleura obtained by this technique from a patient whose diagnosis was later found to be carcinoma of the lung. The typical findings of malignancy are rather obvious. Figure 8 shows evidence of chronic granulomatous inflammation, which the pathologist considered to be compatible with the diagnosis of tuberculosis.

I should now like to show you a table comparing our results with those obtained by other workers (Table 2). You will note that our figure for percent of diagnoses made by biopsy compares favourably with that of Mestitz, Heller and Samuels, but is poor, compared to the results obtained by Donahoe. With regard to the diagnosis of tuberculosis from this type of specimen, our own study shows up very poorly. While not wishing to make excuses, or throw the blame on the shoulders of others, I feel that, particularly at the outset of the study, the pathologists who were examining our sections were somewhat reluctant to make a diagnosis of tuberculosis merely from the presence of chronic granulomatous inflammation. I am quite certain that, with more experience in examination of this type of section, most pathologists would be prepared to be more daring, and make a histologic diagnosis of tuberculosis more frequently.

TABLE II

Author	Number In Series	Percent Diagnoses Made by Biopsy	Effusion Diagnosed as Tbc, on Clinical Grounds. Definitive Diagnosis by Biopsy	Effusion Diagnosed as Malignancy on Clinical Grounds Definitive Diagnosis by Biopsy	Biopsy Non- Diagnostic as a % of all Those Performed	Tissue in- adequate for Diagnosis as a % of all Those Performed
Mestitz	223 biopsies 200 cases	47%	80%	60%	42%	2%
Donahoe	45 biopsies 45 cases	73%	83%	50%	45%	27%
Heller	22 biopsies 20 cases	40%	75%	30%	40%	9%
Samuels	52 cases all Suspected Malignant	50%	TO Second	50%	50%	0%
Approx. Average		50%	80%	50%	45%	5%
Present Series	38 biopsies 33 cases	45.5%	36%	54.5%	38%	29%

It will also be seen from this table that we were able to corroborate the diagnosis of malignancy when such was suspected clinically in 54.5% of cases, which, of course, compares very favourably with the results obtained by the other workers. You will note, also, that our figure for "non-diagnostic" biopsies is approximately the same as that of the other workers. Finally with regard to the matter of "tissue inadequate for diagnosis", we have an extremely high figure. This, I believe, is partially due to the fact that attempts at needle biopsy of the parietal pleura in this series were made by different members of the staffs of the three hospitals concerned. They included myself, two resident physicians at Point Edward Hospital and several resident physicians at the Halifax Tuberculosis Hospital and the Victoria General Hospital. It is understandable that a meticulous technique such as this requires repeated performance of the procedure until it becomes almost second nature, a situation which did not exist in this study. This is, however,

probably not the entire answer. In discussing this matter with the pathologist, I found that, unless one pathologist was specifically assigned to this project, and supervised the cutting of sections, errors would be made by technicians in the preparation of the section for examination. For example, each small cylinder of biopsy tissue should consist of a thickness of skin, a layer of subcutaneous tissue, a layer of intercostal muscle, a thickness of endothoracic facia, and finally a thickness of pleura. If the technicians cutting the sections were not warned of this and closely supervised at the outset, it was quite within the bounds of possibility that sections would be made of all layers of the thoracic wall down to, but not including, the pleura. In such a situation it is not difficult to explain the absence of pleural tissue in so many specimens.

I consider this to be merely a pilot study and, because I am convinced that needle biopsy of the parietal pleura is a valuable diagnostic procedure, I have made certain plans for continuing the study. It is my firm opinion that our figures can be considerably improved by the changes in procedure to

be outlined,-

1. The use of one of the newer types of biopsy instruments, preferably a "punch". To this end I have already ordered 2 Abrams needles of the type with which Mestitz carried out his series of 223 biopsies in 200 patients. I feel that our results will be improved by the use of this instrument and, in particular, there will probably be a smaller proportion of specimens in which the report is "No pleura seen".

 In future, an attempt will be made to have needle biopsies performed by a single person or, at the most, two individuals who are familiar with the technique. This will undoubtedly also bring about an im-

provement in results.

3. When we begin our new series of biopsies, I intend to seek better liaison between our department and the Department of Pathology. It is my hope that one pathologist will be made responsible for the preparation and examination of these sections. This will do away with certain problems that have arisen in the past. These include,—

) Specimens "lost" between the various hospitals and the Patho-

logical Institute.

(b) As indicated above, sections of the biopsy specimen will be taken through the entire thickness of the specimen, and the one or two crucial sections from the block, i.e., those containing pleura, will not be discarded.

(e) As the pathologist becomes more accustomed to examining this type of specimen, he will probably become more "daring" in

making an etiologic diagnosis.

SUMMARY

1. The importance of pleural biopsy in pleurisy with effusion has been emphasized, and the recent literature on this subject has been reviewed.

 The author's experience in needle biopsy of the parietal pleura, using the Vim-Silverman needle, as first outlined by DeFrancis and

others has been described.

In this series, 38 needle biopsies were carried out on 33 patients.
 In these, a total of 45.5% of diagnoses were made by biopsy, the

poorest results being in the diagnosis of tuberculosis, and the

best results in the diagnosis of malignancy.

4. In a rather high percentage of biopsies (29%), the tissue was considered inadequate for diagnosis; and plans are outlined for continuing the study, using methods calculated to result in a higher proportion of diagnostic biopsies.

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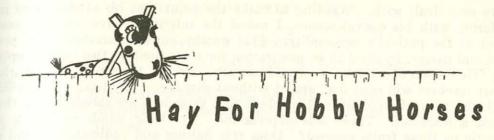
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STAPHYLOCOCCAL PNEUMONIA IN INFLUENZA IN RELATION TO ANTECE-DENT STAPHYLOCOCCAL SKIN INFECTION. GOSLINGS, W. R. O.: LANCET, 428, 1959.

Despite powerful antibiotics, secondary bacterial infection was still the most important single or accessory cause of death in the influenza pandemic of 1957-58. The authors investigated 40 cases of influenza with secondary staphylococcal pneumonia for a possible antecedent staphylococcal skin or other open infection. In 14 cases (35 per cent) correlation could be proved by the similarity between the causative organism of the skin lesion and the pneumonia. In a further eight cases (20 per cent) such a correlation appeared probable. A proven or probable correlation was found in another 32 cases from various hospitals in Holland. Only about one-third of the skin lesions were in the patients themselves. Most were in members of their families. Bacteria from the sputa or postmortem material of cases who had been in hospital for a few days differed in sensitivity and phage type from strains obtained on admission or from necropsies performed within 24-hours of admission. Appreciation of these facts in the management of patients may lead to a diminished incidence of staphylococcal infection in influenza. Virulent staphylococci do not always show themselves by active skin lesions but an active lesion is a warning signal that such an organism is circulating. It seems wise to heed this signal in time of influenza and to treat all staphylococcal lesions treated with the utmost care.



THE VANISHING ARTS REEDIN' AND RITIN'

The 102nd Anniversary issue of the Atlantic Monthly (Nov. 1959) contains five articles on the teaching of reading and writing. Such is the measure of my dotage that I read these before I discovered Sex and the College Girl, a provocative tid-bit that appears earlier in this issue. I will quote from the first, Composition at the Barricades and the last, Solomon or Salami, "In his struggle to save the written language, today's teacher of English stands almost alone.—the essay test, that is, the examination which demands original thinking and writing is dead. The fall of the essay examination as a college entrance test is perhaps the greatest single cause of the decline of the teaching of composition in the schools. The use of objective tests has not only decreased practice in writing, it has given schools the idea that colleges do not put much value on a sound training in writing." (and later) "Holding fast the connections between words and the realities of experience is the essence of all use and understanding of language-Taught and practiced in the grade schools, the process of relating language to actual experience can become established as the way the mind works." In the last article Solomon or Salami, a teacher of remedial reading classes tells about the 'constant distortion of sense' by readers at all levels. "What children know as reading is a difficult, tedious, complicated, confusing, time-consuming, uninteresting, and unserviceable exercise in visual recall, association, surmise, invention, prediction, paraphrase, substitution, and interpolation or omission at will-all blighted by an incessant striving for speed. This uncoordinated exertion mutilates or even obliterates the meaning of the writer. Communication between mind and mind is not even glimpsed as a goal, since the reader decides, instead of discovering, what this meaning may be."

"The essence of the matter is not that reading has not been taught, although indeed it has not, but rather that something has been taught which is not reading. Imposed upon the majority of the students of high school and college age today is a perverse and illogical concept of a word as a visual symbol of meaning instead of as a symbol, by grace of the letters which com-

pose it, of the sound which conveys the meaning."

Last fall I toiled through a field study written by a third year medical student. In due course, this man will graduate in medicine. His sentences collapsed for want of a verb, misspellings were so common as to go almost unnoticed after a page or two, some paragraphs were incomprehensible because of faulty sentence structure or befogged expression. This chap's written work was not less memorable than another student celebrated below. Some years ago I had, as a patient, a man with a chronic duodenal ulcer who was hostile to his medical attendants and irritable with the nurses while demanding extra attention and care. He was as surly and uncooperative a man as I

have ever dealt with. Wanting to make the point that his attitude was interfering with his convalescence, I asked the interne to give me an assessment of the patient's personality. This worthy, on the threshold of a professional career, frowned in concentration for a moment or two before replying "He's a son of a bitch." I could not persuade him to amplify his remarks. Most teachers will read my lament without surprise. Physicians, unfamiliar with this type of student, will conclude that these lads are exceptions or that I am a martinet. These lads depress me. Are their minds as barren or chaotic as these fruits suggest? Does this halting and rudimentary kind of expression represent their intractability or the steady degeneration of our educational system! One, perhaps both, had arts degrees from Maritime universities. Lowe says, in Solomon or Salami, "We are not dealing with the practical handicap of slow or unskillful reading but with a disabling and deforming of the learning powers of many of the brightest." I have assumed that these students did badly because they were unwilling to make the necessarv effort. A more frightening thought is that our students are unable to do better.

There is no need to plead the desirability of clear exposition for the professional man. Is the ability to express oneself simply and clearly in writing less common now than a generation ago? We place no premium on "good English" in the medical school. We are glad to see legible writing, correct spelling and clarity of expression but we do not penalize the student for his failure to provide these. Should we even insist that a man be able to read and write effectively when he applies for a place in medical school? Are these skills the essential attributes of the trained mind? Apparently not. We assume that someone or something has failed earlier in the educational system and gets on with our attempts to teach medicine to minds hampered by these basic defects.

There is a ray of hope in this dismal recital. Clear expression (in the spoken or written word) requires the simple ingredients of care, patient application of a short catalogue of simple rules and a minimum of supervision. Many students who harass their professors now and their associates later with confused writing and infantile spelling or grammar could rehabilitate themselves with very little additional effort. This salvation is found in two small books, The Elements of Style (Wm. Strunk, Jr. MacMillan Co. New York) and The Complete Plain Words (Sir Ernest Gowers London H. M. Stationery office 1954). Try the former first. It does the job in only 1300 words, such as these "Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentences, for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts. This requires not that the writer make all his sentences short, or that he avoid all detail and treat his subjects only in outline, but that every word tell."

Yours for clarity and brevity,

PERSONAL INTEREST NOTES

CUMBERLAND MEDICAL SOCIETY

Dr. and Mrs. W. M. Grant have just taken a six week motor trip to Florida.

Dr. Louis Ryan has returned to his practice in Parrsboro.

Dr. David Kernohan, Parrsboro, has recently returned from a visit to his relatives in Ireland.

HALIFAX MEDICAL SOCIETY

January 13, 1960—Third Regular Meeting of the Halifax Medical Society at Camp Hill Hospital. The clinical presentation was "Cancer Detection" by Dr. Donald F. Smith; and Pheochromocytoma by Drs. R. C. Jones, D. L. Roy and C. L. Gosse.

Dr. Donald M. Grant has succeeded Dr. A. B. Campbell as Chief Medical

Officer of the Workmen's Compensation Board of Nova Scotia.

Dr. Hugh W. Schwartz and Mrs. Schwartz, Bedford, are spending the

winter months in Jamaica.

Dr. H. L. Scammell has assumed his new duties as Executive Director of the Nova Scotia Alcoholism Research Commission. Prior to his departure from the Workmen's Compensation Board, he and Mrs. Scammell were guests at a dinner tendered by the Minister of Labour, Chairman and Members of the Board, and Executive and Medical Staff of the Board, and their wives, at the Lord Nelson Hotel. They were also presented with gifts by the Board and Staff.

The two local medical fraternities held their annual initiation banquet and dances: Phi Chi on January 21, and January 23 respectively; and Phi Rho

Sigma on January 28 and January 30, 1960.

Excavation work for the \$5,000,000 addition to the Halifax Infirmary was halted on January 13, 1960 on orders of the City Building Inspector because plans were contrary to certain building regulations and because a building permit had not been applied for. After a meeting between the City, the Sisters of Charity, the Board of Directors of the Infirmary, the Architect and the general contractor, these difficulties were ironed out. Work had barely got underway again, when Halifax was "snowed under" on February 3, 1960.

Speaking of hospital construction, a recent article in the Dartmouth Free Press states that the outlook is promising for the construction of a modern general hospital, of not less than 100 beds, to be in operation before the close of 1965, for the Town of Dartmouth. Forty-two years have passed since the initial efforts were made to have a hospital in Dartmouth, and while they were not crowned with success, considerable progress had been made.

Dr. Hari Misir, Nova Scotia Hospital Staff, has recently gone to take up

practice just outside of Saskatoon.

Mrs. Henry B. Hicks, Bridgetown, mother of the Hon. Henry B. Hicks, Leader of the Opposition, left to visit her other son, Dr. Franklyn Hicks, Medical Attache at the Canadian Embassy, Vienna, Austria.

Dr. and Mrs. Gordon Wiswell returned to Halifax January 6, after visit-

ing New York and Baltimore for the previous few weeks.

Pearson Beckwith, son of Dr. and Mrs. Charles Beckwith, Halifax, has recently returned to Boston to resume his musical studies.

Dr. Wallace and Mrs. Roy, Toronto, recently spent the holiday season with Dr. Roy's mother and two brothers, Commander K. M. Roy and Dr. D.

Roy.

Dr. J. N. Lyons, previously of Dartmouth, is presently zone superintendent of the North Battleford Indian Hospital in Sask. This area of Northern Saskatchewan is divided into three zones, giving medical care to some 20,000 Indians. The North Battleford area looks after the North West one-third, which includes some 5,000 Indians, mostly Crees, who participated in the Riel Rebellion. The hospital itself has some 55 beds, and employs 1 full time medical officer, in addition to the superintendent, and two part time physicians.

Dr. and Mrs. H. B. Atlee, Halifax, returned February 3, from a speaking

engagement at Medical Meetings in Saskatchewan.

VALLEY MEDICAL SOCIETY

The \$988,000 tender of V. C. Woodworth Ltd., Kentville, has been accepted by the Hospital Board for the construction of a 68 bed hospital at Middleton. Work on the new hospital will begin soon and should be completed by July, 1961.

WESTERN NOVA SCOTIA MEDICAL SOCIETY

Dr. A. M. Siddall of Pubnico, accompanied by Mrs. Siddall left on February 1 for a Mediterranean Cruise, which will include a safari into the wilds of Africa. He will be away two and one-half months.

Dr. Ian F. Bruce, formerly of Dartmouth, has taken over the residence

and practice of the late A. F. Weir at Hebron, N. S.

Dr. and Mrs. D. F. Macdonald, Yarmouth, left via T.C.A. for a short vacation in the Caribbean area.

BIRTHS

Dr. and Mrs. W. G. Cameron (nee Dorothy Muir), a son, Blake Muir, Dryden Hospital Ontario, January 16, 1960.

Dr. and Mrs. Robert Campbell, Shelburne, a son, Colin Mark, on January

18, 1960. A brother for Robbie and Tan.

Dr. and Mrs. John H. Feindel (Alice Rice) twin sons, Kevin Howard, and Michael Frederick, Annapolis General Hospital on January 6, 1960. Brothers for Steven John.

Dr. and Mrs. Earl L. Reid (nee Janet Dexter), a son, Douglas Dexter,

B.F.M. Hospital Kentville, on January 8, 1960. A brother for David.

Dr. and Mrs. A. M. Sinclair, a son, Robert Thane, Grace Maternity

Hospital, Halifax, on January 29, 1960.

Dr. and Mrs. Garth Vaughan (Muriel Emmett) formerly of Halifax, a daughter, Lisa, at Guys Hospital, London, England on January 27, 1960.

CONGRATULATIONS

To Dr. Kurt Aterman, Associate Professor of Pathology at Dalhousie University and Pathologist at Children's Hospital, Halifax, on his recent doctorate of philosophy degree in absentia, from the University of Birmingham, England.

To Dr. Ann Hammerling, on her recent citation, in Montreal, at the eight-

eenth biennial convention of Canadian Hadassah WIZ organization.

UNIVERSITY

The Royal College of Physicians and Surgeons of Canada (Ed. Note: there follows a list of successful Fellowship and Certification candidates for the 1959 examinations recently completed. Since the total number for Canada is slightly in excess of 700, we have included only those who are local graduates, local residents, or who are known to have taken some local training).

SPECIALTY	NAME	UNIVERSITY GRADUATION	
Anaesthesia	.MACDONALD, Douglas Andrio C	Dalhousie 1951	. Charlottetown, P.E.I.
Dermatology	RUTTEN, Henry Robertson LEE, Richard Wm. YOUNG, Crossman Harley HOUSE, Arthur Maxwell	Queen's 1935	. HMCS Stadacona, Hfx.
Int. Medicine	.LEE, Richard Wm	Dalhousie 1955	. Lancaster DVA Hosp. N. B.
	YOUNG, Crossman Harley	Dalhousie 1941	. Dartmouth, N. S.
Neurology	.HOUSE, Arthur Maxwell	Dalhousie 1952	. Montreal, P.Q.
Paediatrics	EDDY. George Everett	Dalhousie 1954	Cleveland 20, Ohio
	ROGERS, John WellsSTICKLES, Lee Edward	Queen's 1941	.R.C.N., Halifax
	STICKLES, Lee Edward	Dalhousie 1955	. Fredericton, N.B.
Pathology	.HUDSON, Aubrey Densmore	Dalhousie 1954	.Campbellton, N. B.
D 11.	SORGER, Karl	Graz, Austria 1954	. Halifax, N. S.
Psychiatry	.HIRSCH, Doris Lidz Berlind	Johns Hopkins 1950	. Halifax, N. S.
	BEVAN-JONES, David Howell B	LRCP Lon: MRCS Eng. 1945	. Camp Gagetown, N. B.
	MURPHY, Patrick Noel	Delbourie 1055	Lancaster, N. B.
Diag. Radiology	SHANE, Aubrey MurrayLEE, Earl Robert	Delhousie 1949	Ct Stophon N D
Diag. Radiology	MILLER, Robert Bruce	Dalhousia 1940	Now Classow N S
	PRICE Relph Europe	MaGill 1024	Amhoret M S
	PRICE, Ralph EugeneSHAW, Albert Joseph	Dalhousie 1952	Fairview Hfy Co
Gen. Surgery	BATTCOCK George Wm.	Dalhousie 1950	St. John's Nfld
God bargory	BATTCOCK, George WmBILLARD, Albert Calvin	Dalhousie 1951	B.B. No. 1. Bedford
	BLACKWOOD, Harold John. COOK, George Harvey. GRAHAM, Charles Horace.	Dalhousie 1951	St. John's, Nfld.
	COOK, George Harvey	Dalhousie 1954	.Truro, N. S.
	GRAHAM, Charles Horace	Dalhousie 1954	. Armdale, Hfx. Co.
	HEFFEZ, Gabriel dit André	Paris 1941	. Truro, N. S.
	INGRAHAM, Donald Robson	Dalhousie 1953	.W. St. John, N. B.
	MACDONALD, Charles Jerome	Dalhousie 1953	. Halifax, N. S.
	MACLEOD, James Hall	Dalhousie 1952	. Liverpool, N. S.
	MUNROE, Roy George	Dalhousie 1952	. New Glasgow, N. S.
01 00	GRAHAM, Charles Horace HEFFEZ, Gabriel dit André INGRAHAM, Donald Robson. MACDONALD, Charles Jerome MACLEOD, James Hall. MUNROE, Roy George. SOBEY, Vernon Wm. BRENNAN, Charles Francis. LAWTON, Bakent David	Dalhousie 1953	. Medicine Hat, Alta.
Obs. & Gyn	.BRENNAN, Charles Francis	Dalhousie 1955	. Niagara Falls, Ont.
Ophimalmology	DAW ION, ROBERT David	Damousie 1990	. St. John S. Mild.
Orthopaed, Surg	.SIMPSON, John Sutton	Toronto 1943	. R.C.N., Hahrax
Orology	CHESLEY, Arthur EvansLANSDALL, Frederick Charles	Dalhousie 1955	.St. John, N. B.
			. Rienmond, B. C.
		FELLOWSHIP CANDIDATES 1959	20 1 1 1 2 20 10
Int. Medicine	SAMUELS, Hiemie Simon	Dalhousie 1955	. Montreal, P. Q.
Pathology	CHIPMAN, Charles Donaldson	Dalhousie 1953	. Halifax, N. S.
Orthopaed. Surg	SINCLAIR, Albert McMurdo	Dalhousie 1952	. Halifax, N. S.

COMING MEETINGS

March 9, 1960: Halifax Medical Society:—5th Regular Meeting—R.C.N. Hospital.

May 31, 1960 - June 2, 1960: Canadian Public Health Association-

48th Annual Meeting-Halifax.

June 13-17, 1960: Canadian Medical Association—93rd Annual Meeting—Banff, Alberta.

June 27, 28, 29, 1960: The Medical Society of Nova Scotia-107th

Annual Meeting, White Point Beach, N. S.

June 13-17, 1960: Canadian Medical Association—93rd Annual Meeting, Banff, Alta.

OBITUARY

Dr. David Bryant Morris, 48, Windsor, N. S., died on January 11, 1960. A Dalhousie Medical Graduate (Class 1937), he has a son, who is presently a fourth year medical student at the same university.

Dr. Harry Dow O'Brien, 57, Halifax, died suddenly of a heart attack January 17, 1960. Born in Elmsdale, he came to Halifax in 1910, being educated at Morris Street School and the Halifax Academy, and a Dalhousie Medical School graduate, Class of 1927. He was Assistant to the late Dr. John George MacDougall, joined the RCAMC in 1939, being posted to Number 7 Canadian General Hospital, proceeding overseas in 1943, later transferring to Number 5 Canadian General Hospital in Italy, as Chief of Surgery. He returned to private practice in Halifax at the end of World War 2, being Assistant Professor of Surgery at Dalhousie University, later President of the Halifax Medical Society and President of the Provincial Medical Board of Nova Scotia. At the time of his death he was President of the Medical Council of Canada and a Governor of the American College of Surgeons. His first wife, Dr. Marion Irving, predeceased him, but he is survived by his wife, the former Jean B. Murray, one son, one sister and one brother.

Dr. William G. Colwell, 58, Halifax, died of a heart attack January 13, 1960. Though born in Saint John, N. B., he had lived in Halifax nearly all his life. A medical graduate of Dalhousie (Class of 1923), post-graduate work in Boston and three years on the staff of the Royal Victoria Hospital, Montreal, he returned to practice in Halifax in 1928. He was Clinical Professor of Obstetrics and Gynaecology at Dalhousie University, and on the staffs of the Victoria General and Grace Maternity Hospitals. He is survived by his wife, daughter, and mother. Though it was understood he was not in the best of health, his death came as a distinct shock to his friends and confrères.

ERNEST PERCY WEBBER AN Appreciation

News of the death in January at Halifax of E. P. Webber will be received with regret by surviving members of the interne staffs at the Victoria General Hospital from 1899-1940. During that extended period, Mr. Webber was the Accountant there, and in his later years, the Assistant Superintendent.

Born in Chester, N. S. he began his career as a school teacher, but being attracted to business he came to Halifax and completed the course then offered at Whiston's Business College, predecessor to the Maritime Business College. His first and last position was at the Victoria General Hospital.

The Superintendent of the Hospital then was the late W. W. Kenney, who had been appointed the previous year. Early in the days of his tenure, he asked Webber for some figures on costs. When he proffered the completed task to his chief the following conversation ensued:

Mr. Kenney: "Are these figures correct, Mr. Webber?"
Mr. Webber: "I think so, Mr. Kenney."

Mr. Kenney: "It is not part of your work to give me figures you think

are right; you must give me figures you know are right."

That brief exchange set the pattern for Mr. Webber's entire life at the Hospital. Regardless of time and effort necessary, the work must be right. In 1926 when P. S. Ross and Sons of Montreal made an independent and comprehensive audit of the affairs of all Provincial Government Institutions, Webber's records stood the test: a quarter century of bookkeeping without an error!

As internes at the Hospital we knew him well; we ate with him at the same table every day. He was an enthusiastic man on many subjects and this often gave rise to as many arguments, not always with a serious background. If we challenged him to explain why "the brine rises in the kraut barrel at the full of the moon," he might fail, but he retained the conviction that it did. He was a good man in the highest sense of that word, and his supreme faith in the "things unseen" permeated his whole life, and I am certain was a good influence on all of us.

I think that Webber was the last survivor of the Old Brigade at the V.G.-Puttner, Kenney, Mrs. Reid, Miss Hansen, Mary Madigan, Alice Cox, all are gone, and many others unnamed. The total service of these alone represents some two centuries of work for the Province of a kind and a degree of loyalty to an institution that can never be surpassed.

The Bulletin extends to Mrs. Webber and the members of the family,

its sincere sympathy.

One of Those Internes H.L.S.

SYMPATHY

The Nova Scotia Medical Bulletin extends sympathy to Dr. C. D. Chipman, Halifax on the death of his father, Dr. H. R. Chipman on February 7, 1960.

ANNUAL MEETING-1960

THE MEDICAL SOCIETY OF NOVA SCOTIA

The Annual Meeting, 1960, will be held at White Point Beach Lodge, Queens County, on Monday, Tuesday and Wednesday, June 27, 28 and 29th, inclusive.

The Lunenburg-Queens Branch of the Medical Society of Nova Scotia is the host Society.

The following have been appointed Committee Chairmen:

General Chairman—Dr. W. A. Hewat, Lunenburg. Pres. The Medical Society of Nova Scotia.

Chairman Programme Committee-Dr. H. A. Fraser, Bridgewater.

Chairman Entertainment and Golf Committee-Dr. J. C. Wickwire.

Chairman Ladies Programme-Mrs. W. A. Hewat, Lunenburg.

Chairman Housing and Exhibitors-Dr. L. A. MacLeod, Liverpool.

Plans are that the Executive Committee will have a regular meeting on June 25th and its Annual meeting June 26th.

The housing application form is published elsewhere in the Bulletin. Please note that the request is made to send this in early.

White Point Beach Lodge is delightfully situated on the Atlantic, 10 miles beyond Liverpool from Halifax. An excellent and novel programme including social activities is being developed.

Make your plans now to attend and send off your housing application form.

C.J.W.B.

EVALUATION OF CHLOROTHIAZIDE ALONE IN THE TREATMENT OF MODERATELY SEVERE AND SEVERE HYPERTENSION. FINNERTY, F. A. ET AL: CIRCULATION, 20: 1037, 1959.

Eleven patients with severe hypertension and thirty with moderately severe, were placed on alternating six-month courses of chlorothiazide alone and chlorothiazide with standard antihypertensive therapy. They were on regular diet and 500 mg. chlorothiazide twice daily. In severe hypertension neither chlorothiazide alone nor ganglionic blocking agents plus reserpine represented effective treatment. The addition of chlorothiazide to ganglionic blocking agents plus reserpine was effective therapy. In moderately severe hypertension combined therapy gave satisfactory control in all cases, but isolated therapy controlled only 50%.

ANNUAL MEETING-1960

HOUSING APPLICATION FORM

The Medical Society of Nova Scotia

White Point Beach Lodge, Oueen's Co., N. S. June 27th., 28th., & 29th, 1960

Main Lodge
Double room with bath—including meals—\$10.00 a day per person.

Cottage with single bedroom for two people-including meals-\$10.00 a day.

DR. L. A. MacLEOD, Liverpool, N. S.

A.

B.

			. 7			
Plasse reserve	for	me	the	following	accommod	lations—

C.	Cottage wit	th two bedro	oms for four pe	ople, including	g meals—	\$9.00 a day.	
	I WILL EX	CPECT TO	ARRIVE JUNE)	A.M	P.M.	
	I WILL EX	CPECT TO	DEPART JUNI	£	A.M	P.M.	
Name	of persons	who will occ	ipy above accor	nmodations:			
	Name (Dr.	and Mrs.)					
	Address		***************************************				
Beach check doubl	Lodge unles	ss cancellatio	ons permit. If e	oming alone a	nd willin	vailable at White g to share a room p ome party to sha ame(s) below:	olease
	I would pref	fer to share a	accommodation	with			
		Name					
		Address					
		Name				transfer land	
		Address					
respon	This form asibility for	rooms.				committee assume	es no
			firmation of				
Dr. a Beach	nd Mrs Lodge.	ZHILLI 2	ha	ve reservation	ns as fol	lows for White	Point
	Cabin	No					
	Room	No					
	Date		·				

BOOK REVIEW

TRIFLUOPERAZINE: FURTHER CLINICAL AND LABORATORY STUDIES. Philadelphia, Lea and Febiger, 1959. 191 pp.

This book, the second of a series, contains twenty-one reports on the use of Trifluoperazine (Stelazine) under these headings: Mental and Emotional Disorders in Out-patients, Adjuvant Therapy in Psychosomatic Conditions, Management of Behaviour Disorders in Mentally Defective Children, Antiemetic Effects, Pharmacological and Laboratory studies, and Extrapyramidal

Symptoms.

For the most part the reports describe studies with small numbers of patients and no controls. Considering the fact that the main use of such a tranquilizer—treating hospitalized schizophrenics—is not described, the results are so good that one's skepticism is aroused. It is quite striking to note that almost all reports on all tranquilizing agents in the literature describe good to excellent results. Enthusiasm of this degree does not appear to be felt by many clinicians using the drugs, at least as far as one can gather from verbal communication.

The reports describe Trifluoperazine of particular value as a tranquilizing agent in that it produces little, if any, lethargy or drowsiness; it is long acting so that only two doses daily are usually required and no case of jaundice, agranulocytosis or seizures occurred. One report mentions two cases of dermatitis which disappeared when the drug was discontinued. Extrapyramidal symptoms occurred infrequently during dosages from 2-8 mg. daily, but when higher dosages (up to 60 mg. daily) were used, these symptoms were very frequent.

The reports describe Trifluoperazine in low dosages as being very useful in the treatment of anxiety states and mixed psychoneurotic states, alone, or in conjunction with psychotherapy. It is often markedly beneficial, usually in much higher doses (8-60 mg. daily) in the out-patient treatment of schizophrenic patients, even chronic patients not helped by other therapies including other tranquilizers. It is reported as useful in the management of chronic alcoholics, the treatment of acutely disturbed alcoholics, the management of emotional problems in the aged, and in the treatment of various psychosomatic conditions. It is described as more effective than other tranquilizers in the management of hyperactive, mentally defective children. It has pronounced antiemetic effect and is useful in treating persistent nausea and vomiting of pregnancy and in the nausea and vomiting of children associated with acute gastroenteritis.

There is a very good review of the pharmacology and of the extra-pyra-

midal symptoms produced by Trifluoperazine.

All in all, the reports appear overly enthusiastic to the reviewer, but they also gave the impression that Trifluoperazine is a very useful tranquilizer with some unique properties.

INFECTIOUS DISEASES—NOVA SCOTIA Reported Summary for the Month of November, 1959

Marinella Para a allega						NADA 1958
The second secon	C 1	959 D	C	D D	1959 C	C 1956
Diseases	U	D	0	D	0	0
Brucellosis (Undulant fever) (044)	0	0	0	0	7	0
Diarrhoea of newborn, epidemic (764)	0	0	0	0	1	0
Diphtheria (055)	0	0	0	0	1	13
Dysentery: (a) Amoebic (046)	0	0	0	0	0	0
(b) Bacillary (045)	0	0	0	0	146	0
(c) Unspecified (048)	0	0	0	0	41	0
Encephalitis, infectious (082.0)	0	0	0	0	2	2
Food Poisoning: (a) Staphylococcus intoxication (049.0)	0	0	0	0	0	0
(a) Staphylococcus intoxication (049.0) (b) Salmonella infections (042.1)	0	0	0	0	0	0
(c) Unspecified (049.2)	8	0	0	0	81	0
Hepatitis, infectious (including serum hepatitis) (092, N998.5)	31	0	119	0	277	0
Meningitis, viral or aseptic (080.2, 082.1)	•	0	0	0	0	0
(a) due to polio virus (b) due to Coxsackie virus	0	0	0	0	0	0
(c) due to ECHO virus	0	0	0	0	0	0
(d) other and unspecified	0	0	0	0	82	0
Meningococcal infections (057)	0	0	0	0	16	24
Pemphigus neonatorum (impetigo of the newborn) (766)	0	0	0	0	0	0
Pertussis (Whooping Cough) (056)	0	0	19	0	721	653
Poliomyelitis, paralytic (080.0, 080.1)	1	0	0	0	139	15
Scarlet Fever & Streptococcal Sore Throat (050, 051) Tuberculosis	104	0	206	0	1940	1429
(a) Pulmonary (001, 002)	18	3	13	4	409	318
(b) Other and unspecified (003-019)	3	0	0	0	105	28
Typhoid and Paratyphoid Fever (040, 041)	0	0	0	0	19	10
Venereal diseases (a) Gonorrhoea —						
Ophthalmia neonatorum (033)	0	0	0	0	0	0
All other forms (030-032, 034)	39	0	25	0	1092	1322
(b) Syphilis —		1417 1117	TAIL AT	ALC: U	U. 10, 11	K J II
Acquired—primary (021.0, 021.1)	0	0	0	0	0	0
— secondary (021.2, 021.3) — latent (028)	2	0	0	0	0	0
- tertiary - cardiovascular (023)	0	0	0	0	0	0
— " — neurosyphilis (024, 026)	0	0	0	0	0	0
— ,, — other (027)	0	0	0	0	0	0
Prenatal—congenital (020)	0	0	0	0	0	0
Other and unspecified (029)	1	3	7*	1	138*	224*
(c) Chancroid (036)	0	0	0	0	0	0
(d) Granuloma inguinale (038)	0	0	0	0	0	0
(e) Lymphogranuloma venereum (037) Rare Diseases:	0	0	0	0	0	0
Anthrax (062)	0	0	0	0	0	0
Botulism (049.1)	0	0	0	0	0	0
Cholera (043)	0	0	0	0	0	0
Leprosy (060)	0	0	0	0	0	0
Malaria (110-117) Plague (058)	0	0	0	0	0	0
Paitacosis & ornithosis (096.2)	0	0	0	0	0	0
Rabies in Man (094)	0	0	0	0	0	0
Relapsing fever lever 1 (071.0)	0	0	0	0	0	0
Rickettsial infections:			-	-		
Rickettsial infections: (a) Typhus, louse-borne (100) (b) Reciect (100)	0	0	0	0	0	0
- NOCKY Mountain spotted tever (104 part)	0	0	0	0	0	0
(c) Q-Fever (108 part) (d) Other & part (101 102)	0	0	0	0	0	0
(d) Other & unspecified (101-108) Smallpox (084)	0	0	0	0	0	0
letanus (061)	0	0	0	0	0	0
Inchinosis (128)	0	0	0	0	0	0
Tularaemia (059) Yellow Fever (091)	0	0	0	0	0	0

C - Cases D - Deaths

^{*}Not broken down

REMARKS:

There is one additional case of poliomyelitis, Type 1, from Kings County reported during the month of November, 1959.

One death from Pulmonary Tuberculosis should be deleted from the

totals for the month of November, 1959.

ABSTRACTS

A Philosopher looks at Medicine. Charles Frankel, Professor of Philosophy, Columbia University. Journal Medical Education, Oct. 1959. Vol. 34:

Number 10, Part 2.

I think that anyone, in any field, knows how daily practice acts as an enemy of the mind. It dulls the mind and beds it down in routine. The notion that there is another alternative, that there might be a different way, or even that this case is unique, only comes when you have a highly developed theoretical background and something of a theoretical flair.

L. C. S.

A Philosopher looks at Medicine. Charles Frankel, Professor of Philosophy, Columbia University. Journal Medical Education, Oct. 1959. Vol. 34:

Number 10. Part 2.

There are, in short, controversial issues which have arisen as a result of progress in medicine. If doctors are aware of these controversial issues and if some of them speak out on these controversial issues it seems to me that they will perform a useful service as citizens—provided they act as citizens and not as pseudo-scientific seers.

L. C. S.

Vacca, J. B., Knight, W. A., Broun, G. O. Clinical Observations Regarding Xanthelasma: Annals of Internal Medicine 51: 1019-1031, November 1959.

Fifty-one consecutive patients with xanthelasma were studied clinically and by laboratory procedures, to determine more specifically the clinical significance of xanthelasma. This appears to be the most frequently encountered type of xanthoma; and obesity, diabetes mellitus and the postmenopausal state, hypercholesterolemia, and occlusive vascular disease of the coronary circulation in particular, occurred with an increased incidence. Thirty-eight per cent of females were more than forty pounds overweight. Thirty-four per cent of those tested (35 cases) had diabetes. Thirty-one of thirty-five females were postmenopausal. Seventy-three per cent of the fifty-one cases had serum cholesterol level greater than 300 mg.%, and coronary artery disease was present in 69% of the males and 43% of the females.

ABSTRACT

The Rational Approach in the Use of Bronchodilators in Chronic Respiratory Disease. Farber, S. M. and Wilson, R. H.: Ann. Int. M. 50: 1241, 1959.

The mechanisms for the obstructive wheezing found in asthma, chronic bronchitis, senile emphysema and bullous emphysema are discussed in this paper. Bronchospasm is a variable part of the mechanism of obstruction but is almost never the whole cause and, in the majority of cases, is not even an important cause in the opinion of the authors. Therefore, the use of nebulized sympatheticomimetic agents to reduce bronchial mucosal oedema as well as relax bronchial muscle, together with basal bronchial muscle relaxation by such substances as ephedrine, appears to offer the most help. Parasympatheticomimetic agents are discussed and their occasional usefulness by nebulization is pointed out; however, it is felt that they belong to the group of drugs best administered systemically. The usefulness and the limitations of aminophylline and other similar agents are considered, in increasing respiration, improving cough and providing relaxation of the bronchial musculature. It is realized that the best results with aminophylline will be obtained in the patient in whom bronchospasm and secretions are the major problem.

The direct bronchodilators form only a part of the whole treatment of the patient with obstructive emphysema causing wheezing. Some of the other modes of treatment are briefly outlined. Nevertheless, these substances probably form the backbone of treatment of the average case and the best mechanism of using them will provide a better therapeutic result with less systemic

toxicity.

S.J.S.

Massive Bleeding in Duodenal Ulcer. Bardner, B. and Baronofsky, I. D. Bull. N. York Acad. M. 35: 554, 1959.

Analysis of 235 patients with massively bleeding duodenal ulcers, admitted to the wards of The Mount Sinai Hospital, New York, between 1946 and 1957, indicates that medical management is the preferred treatment in the first 24-48 hours. However, those who have received 2,000 milliliters of blood and still require transfusion, will have a lower mortality with immediate surgery. After recovery on medical treatment, there is a fifty per cent chance of recurrent bleeding, and an eighteen per cent chance after surgical treatment. Early X-ray demonstration of the bleeding site is recommended, the presence of a crater indicating a long course and poor prognosis under medical management of the haemorrhage. The importance of controlling bleeding before surgery, is indicated by a mortality rate of 20.8 per cent for surgery during active bleeding, with 1.4 per cent for surgery after bleeding was controlled.