

THE MEDICAL SOCIETY OF NOVA SCOTIA

NOVA SCOTIA DIVISION OF THE CANADIAN MEDICAL ASSOCIATION

MEMBERS OF EXECUTIVE COMMITTEE

OFFICERS

<i>President</i>	L. C. Steeves
<i>President-Elect</i>	J. F. L. Woodbury
<i>Immediate Past President</i>	F. A. Dunsworth
<i>Chairman Executive Committee</i>	C. E. Kinley
<i>Vice-Chairman Executive</i>	P. B. Jardine
<i>Honorary Treasurer</i>	J. A. Myrden
<i>Honorary Secretary</i>	W. C. Nicholas
<i>Executive Secretary</i>	D. D. Peacocke

BRANCH SOCIETY REPRESENTATIVES

<i>Antigonish-Guysborough</i>	G. Silver
<i>Cape Breton</i>	P. S. Gardner, J. A. McPhail
<i>Colchester-East Hants</i>	H. D. Lavers
<i>Cumberland</i>	J. A. McCully
<i>Dartmouth</i>	James A. Smith
<i>Eastern Shore</i>	S. W. Potter
<i>Halifax</i>	D. R. S. Howell, W. E. Pollett, B. J. Steele
<i>Inverness-Victoria</i>	C. S. Chow
<i>Lunenburg-Queens</i>	D. A. Campbell
<i>Pictou County</i>	J. F. Hamm
<i>Shelburne</i>	F. Markus
<i>Valley</i>	D. J. G. Morris
<i>Western</i>	F. Ozvegy

Consultant: C. J. W. Beckwith

OBSERVERS

<i>Representative to C.M.A. Board of Directors</i>	A. J. M. Griffiths
<i>Chairman Public Relations Committee</i>	D. B. O'Brien
<i>Chairman Medical Economics Committee</i>	K. B. Shephard
<i>Editor</i>	D. A. E. Shephard
<i>Representative to Provincial Medical Board</i>	J. A. Myrden
<i>Medical Director M.M.C. Inc.</i>	A. W. Titus
<i>General Manager M.M.C. Inc.</i>	S. P. Brannan

STANDING COMMITTEES

Chairman

<i>Aging</i>	P. C. Gordon
<i>Anaesthesia Standards</i>	D. A. E. Shephard
<i>Annual Meeting</i>	President
<i>Archives</i>	C. J. W. Beckwith
<i>By-Laws</i>	H. J. Devereux
<i>Cancer</i>	J. A. Aquino
<i>Child Health</i>	B. D. Grover
<i>Civil Disaster</i>	A. R. Prossin
<i>Editorial Board (Editor)</i>	D. A. E. Shephard
<i>Fees</i>	J. H. Charman
<i>Finance (Hon. Treas.)</i>	J. A. Myrden
<i>Hospitals</i>	B. C. Trask
<i>Insurance</i>	Roland Perry
<i>Legislation and Ethics</i>	D. R. S. Howell
<i>M.M.C./M.S. Joint</i>	J. A. Myrden
<i>Maternal and Perinatal Health</i>	D. W. Cudmore
<i>Mediation and Discipline</i>	President
<i>Medical Economics</i>	K. B. Shephard
<i>Medical Education</i>	J. E. MacDonell
<i>Medical-Legal Liaison</i>	I. D. Maxwell
<i>Medical-Religious Liaison</i>	D. C. Brown
<i>Membership</i>	N. G. Glen
<i>Mental Health</i>	E. Ryan
<i>N.S.H.I.C. Liaison</i>	J. F. L. Woodbury
<i>Nutrition</i>	C. M. Harlow
<i>Occupational Medicine</i>	L. A. MacLeod
<i>Pharmacy</i>	C. A. Gordon
<i>Physical Education and Recreation</i>	M. Shaw
<i>President's Liaison</i>	President
<i>Public Health</i>	J. B. MacDonald
<i>Public Relations</i>	D. B. O'Brien
<i>Radiological Standards Advisory</i>	P. B. Jardine
<i>Rehabilitation</i>	B. J. S. Grogono
<i>Traffic Accidents</i>	R. F. Scharf
<i>W. C. B. Liaison</i>	G. H. Cook

NOVA SCOTIA REPRESENTATIVES TO C.M.A. COUNCILS

<i>Community Health Care</i>	P. C. Gordon
<i>Economics</i>	K. B. Shephard
<i>Medical Education</i>	D. C. Brown
<i>Personal Services to Physicians</i>	C. L. Gosse
<i>Provision of Health Services</i>	P. J. Gouthro

BRANCH SOCIETIES

President

<i>Antigonish-Guysborough</i>	A. E. Dunphy
<i>Cape Breton</i>	H. J. Devereux
<i>Colchester-East Hants</i>	H. D. Lavers
<i>Cumberland</i>	D. Davies
<i>Dartmouth</i>	E. G. Nurse
<i>Eastern Shore</i>	P. B. Jardine
<i>Halifax</i>	D. R. S. Howell
<i>Inverness-Victoria</i>	J. Claude Aucoin
<i>Lunenburg-Queens</i>	F. D. MacDonald
<i>Pictou County</i>	J. H. Fraser
<i>Shelburne</i>	M. T. Cooper
<i>Valley</i>	D. E. Lewis
<i>Western</i>	F. J. Melanson

Secretary

C. N. MacIntosh
S. Lewis Newman
D. A. MacFadyen
M. P. Quigley
N. H. Hansen
M. P. Trivedi
D. C. Brown
C. L. MacMillan, Sr.
M. E. DeLory
W. D. MacLean
A. S. Robbins
D. G. Black
G. A. Legere

SECTIONS

<i>Anaesthesia</i>	S. B. Donigiewicz	K. W. Fairhurst
<i>General Practice</i>	G. C. Jollymore	David B. Keddy
<i>Internal Medicine</i>	W. I. Morse	A. R. McNeil
<i>Obstetrics and Gynaecology</i>	D. F. Smith	C. F. Brennan
<i>Ophthalmology and Otolaryngology</i>	W. S. Hyslop	J. H. Quigley
<i>Paediatrics</i>	B. D. Grover	R. S. Grant
<i>Pathology</i>	N. A. Kerenyi	A. J. Lewis
<i>Psychiatry</i>	D. Whitby	J. M. Tainsh
<i>Radiology</i>	R. Bruce Miller	J. Brander
<i>Residents in Training</i>	H. W. Edstrom	Brian Byrne
<i>Salaried Physicians</i>	A. W. Titus	J. R. Cameron
<i>Surgery</i>	J. A. Myrden	A. S. MacDonald
<i>Urology</i>	F. G. Mack	W. A. Ernst

THE NOVA SCOTIA MEDICAL BULLETIN

Published by The Medical Society of Nova Scotia, Sir Charles Tupper Medical Building, 5859 University Avenue, Halifax, N.S.
Postage paid in cash at the third class rate, permit No. 9. Return postage guaranteed.

Editor-in-Chief

DR. DAVID A. E. SHEPHARD

Board

DR. A. J. BUHR
DR. I. E. PURKIS
DR. M. E. BURNSTEIN
DR. B. O'BRIEN
DR. J. H. HALDANE
DR. M. GORELICK

EDITORIAL BOARD

Corresponding Members

Secretaries of Branch Societies

Managing Editor

MR. D. D. PEACOCKE

Departments

Medical-Legal Column

DR. I. D. MAXWELL

MRS. T. CLAHANE

Editorial Assistant

Think about it . . .

"As soon as public service ceases to be the chief business of the citizens, and they would rather serve with their money than with their person, the state is not far from its fall."

Jean Jacques Rousseau—

Today, more than ever, men must serve with their persons. They must serve not only to advance the cause of the "state", or society, but also to prevent the well intentioned but essentially impersonal machinery of government from overwhelming them and their fellows.

Professionals, men who because of their calling have developed advanced expertise in a variety of fields, are today obliged to exercise their capabilities in areas peripheral to their central interests. And that is as it should be.

It is, by and large, the professional who can pursue the answers to questions of social injustice, the destruction of the environment, and others. It is the professional who has the educational resources, the practised skills and the ability to articulate a point of view. Hopefully, he also has a conscience, the will to do good.

Doctors are professionals. To say that the medical profession must concentrate only on the healing of bodies is to deny the existence of external factors which impinge upon and affect the health of the individual—physically or mentally. Can a doctor honestly say that he is concerned with the delivery of person-to-person health services alone and that society can move where it will?

As a member of society, he would be doing himself a disservice. As a doctor, as a professional, he would be doing his fellowmen a disservice if he did not contribute his knowledge and abilities to the often amorphous and confusing processes by which man seeks to improve his lot.

Participation in public affairs at the political or any other level can lead to accolades and satisfaction. It

can also lead to unlooked for vituperation and scorn. But non-participation can lead to isolation, a forlorn sense of impotence as changing times apparently impose arbitrary hardships, and a non-productive negativism—in itself a potential medical problem.

Certainly, it is not the bounden duty of a doctor to involve himself in the total public affairs picture. Doctors do not have to become politicians. Nowhere is it stipulated that the medical graduate must seek public office. But it is essential that all doctors become aware of all the implications of progress and change; if not from a sense of the need to participate and contribute, then for selfish motives alone.

For instance, the professional who enjoys salmon fishing must become aware of the facts about pollution and must be ready to use his skills to promote constructive solutions to the problem.

Should not the doctor in a small community acquaint himself with that community's economic and social needs and be ready to offer his competence in these areas if and when he is called upon to do so?

These are questions the individual must answer. At the same time, no man can cast aspersions on another who chooses to involve himself in matters beyond the ivory tower.

The man who establishes himself in one of the professions is no less a citizen, no less an individual for his choice of livelihood. He shares the same options for involvement with all men.

He should be encouraged to exercise those options. □

D. B. O'B.

Abortion

The termination of a viable pregnancy has become a vexing problem only in recent years. Not so long ago, one did not even consider abortion except in the most severe medical illness, and then only in the more liberal non-Catholic hospital.

With the dropping of many old hypocrisies and maudlin Victorian attitudes has come a change in the federal statutes. It is now permissible for a hospital staff committee to consider cases for abortion. Unquestionably, this is a step forward but it is bound to be arbitrary. There is, however, a fair and human method of deciding when a pregnancy should be terminated: that is, simply to act on the request of the patient herself with perhaps a compulsory 8-week waiting period as an interval. It is likely that during this time some women will decide against abortion if they are at least 2 months pregnant. And for those who still want abortion, who are we to deny them? What right do we have, when we learn that unwanted births appear to account for between one-third and one-half of the U.S. population growth in recent years, to force an unwanted child on such women? Moreover, why should we add another name to the already bulging welfare list?

At times it would appear morally wrong to refuse this relief to a patient. However, to many of us, the opposite holds true: that it would be morally wrong to end the pregnancy. And when, for example, a young woman threatens to commit suicide unless aborted, where is the right? To base our attitudes on the questionable future of a fertilized egg as against the future of a living, successfully functioning human being, however, does seem to hark back to the dark ages.

Perhaps it would be worthwhile for each of us to re-examine the basis for our present attitudes towards abortion. Let us first take the most disposable factor, the law of the land: disposable, that is, in the moral sense, for the law is always years behind the wants, needs, and feelings of the times. The new omnibus bill recently passed by Parliament leaves it to Medicine to decide when to terminate pregnancy; but, as health matters are under provincial jurisdiction, the interpretation and practice of this change in the law will be extremely varied. Furthermore, as doctors are notor-

iously conservative, they will be slow to use even the little leniency that the law now allows.

One reason for our abhorrence of abortion lies in the Judeo-Christian attitude toward the sanctity of life. The great difficulty comes in our definition of the word life. When is life said to exist? Certainly it is not when the sperm is alone in the testis nor the ovum in the follicle. Nor can it possibly be said to exist in the undifferentiated cells which will become egg and sperm. There should then be no objection to the ligation of Fallopian tubes or to vasectomy. Yet objection exists. Perhaps such an attitude was valid for the shepherd tending his flock in the dark Judean hills: surely it is not equally valid in the latter half of the 20th Century.

Today there are other important questions which are presently taxing the collective ingenuity of our scientific brains: the problems of pollution and over-population. Let us consider these together in the consideration of abortion.

Detergents, sewage, smoke and noxious chemicals while important, are not the most dangerous items polluting our civilization. Far more insidious is the continuous propagation of genetic material, the result of our failure to pass laws to permit sterilization where necessary nor to allow abortion when obviously indicated. Poor genetic material is transferred from generation to generation. In this sense, over-population obviously contributes to pollution: equally obviously its contribution could be controlled by abortion and sterilization. It is even likely that neither would have to be enforced by law, and if these procedures were universally available, the problems of over-population and pollution would be largely alleviated.

We are each entitled to our religious beliefs, or indeed to their lack, and in this sensitive area offence to sensibilities is not intended. But as physicians, we do not have the right to allow our personal beliefs to interfere with what is best, in a medical sense, for our patients. We must put our old beliefs behind us and think in terms of a world our fathers never knew: a great responsibility but one which we cannot deny. □

M. E. B.

"He who despairs of the human lot is a coward,
but he who has hopes for it is a fool."

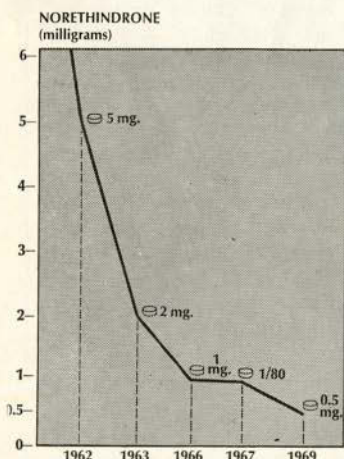
—Camus

The search for a better oral contraceptive.

Now ORTHO introduces an oral contraceptive with even lower progestin potency.

New ORTHO-NOVUM 0.5 mg.

EFFECTIVE CONTRACEPTION is achieved by biological potency of the ingredients rather than by weight alone. So why prescribe a higher potency oral contraceptive when low-potency ORTHO-NOVUM 0.5 mg is enough?



This chart shows how ORTHO* has introduced new formulas for ORTHO-NOVUM tablets over the years. The aim has been to reduce progestational potency and find the best balance of estrogen in order to arrive at an oral contraceptive that is virtually 100% effective yet has minimum potency and good tolerance.

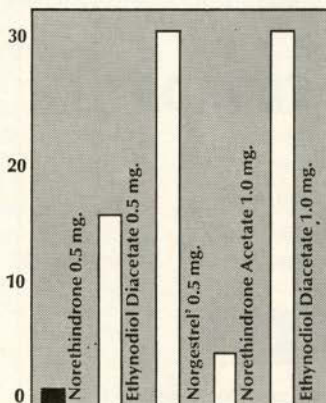
Low-potency but effective

The uniquely balanced ORTHO-NOVUM 0.5 mg formula (0.5 mg norethindrone and 0.10 mg mestranol) has proved virtually 100% effective in recent clinical studies. Of 2,043 patients followed through 10,066 cycles, there were no pregnancies reported with regular use.

ORTHO-NOVUM 0.5 mg proved not only effective, but highly acceptable. Breakthrough bleeding, nausea, and weight change were kept to an absolute minimum. Good reasons why low-potency ORTHO-NOVUM 0.5 mg is the contraceptive tablet to prescribe for new users and patients who have experienced problems on "The Pill."

Norethindrone makes the difference

The progestin, norethindrone, is responsible for the low-potency



Comparative potency¹ of progestins in 0.5 and 1.0 mg oral contraceptives at daily dosage levels. Black bar represents norethindrone, the progestin contained in ORTHO-NOVUM 0.5 mg tablets.

level of ORTHO-NOVUM 0.5 mg. Of the progestins available, it is the one that provides truly low progestational potency on a daily

basis with virtually 100% effectiveness. As a result, the potency-per-tablet of ORTHO-NOVUM 0.5 mg is considerably lower than that of any comparable tablet.

Two easy-to-follow regimens

ORTHO-NOVUM 0.5 mg is available in two regimens: the 21-Day dosage in the "three weeks on, one week off" DIALPAK* Tablet Dispenser; and the 28-Day dosage in the strip dispenser. (It ensures that tablets are taken in the right order.) Both are easy to use. A few seconds is all it will take to explain either regimen to your patient.



Two regimens of ORTHO-NOVUM 0.5 mg: 21-Day DIALPAK Dispenser, and 28-Day in strip dispenser pak.

References

- Greenblatt, R. B.; "Progestational Agents in clinical practice"; Medical Science; May 1967. (... it was imperative to establish, not by animal data but by human testing, the relative low potency of the various progestins. A test was devised: "the delay of menses test...")
- Contains 0.25 mg d-norgestrel.

Ortho-Novum 0.5 mg

norethindrone WITH mestranol TABLETS

Indication

Conception control.

Dosage and administration

21-DAY REGIMEN

For the first cycle only, have your patient take one tablet a day for 21 days, starting on day 5 of her menstrual cycle. At the end of the course of ORTHO-NOVUM 0.5 mg she stops the tablets for one week. From now on, she simply completes each course of tablets, stopping at the end of each course for one week. The tablets should be started whether or not menstruation has occurred or is finished. If spotting or bleeding should occur while she is taking ORTHO-NOVUM 0.5 mg, she should continue taking the tablets in the regular manner.

28-DAY REGIMEN

In the first cycle take an apricot tablet on day 5 of the menstrual cycle (counting the first day of the menstrual flow as day 1). Take 1 apricot tablet daily for 3 weeks followed by 1 inert green tablet daily for 1 week. The next day, begin again with an apricot tablet whether or not bleeding has occurred or is finished. Continue this sequence making sure to take 1 tablet each day.

Duration of use

As long as physician feels is desirable.

Precautions and contraindications

Since it has been suggested that there may be a causal relationship between the use of progestin-estrogen compounds and the development of thrombophlebitis, physicians should be cautious in prescribing ORTHO-NOVUM 0.5 mg for patients with thromboembolic disease or a history of thrombophlebitis. Patients with pre-existing fibroids, epilepsy, migraine, asthma, or a history of psychic depression should be carefully observed. Pre-treatment examination should include a Papanicolaou smear.

ORTHO-NOVUM 0.5 mg should not be taken: In the presence of malignant tumors of the breast or genital tract. In the presence of significant liver dysfunction or disease. In the presence of cardiac or renal disorders which might be adversely affected by some degree of fluid retention. During the period a mother is breast-feeding an infant.

Packaging

ORTHO-NOVUM 0.5 mg in DIALPAK Tablet Dispensers of 21, 28-Day strip dispensers, and bottles of 500.

Detailed information on request.

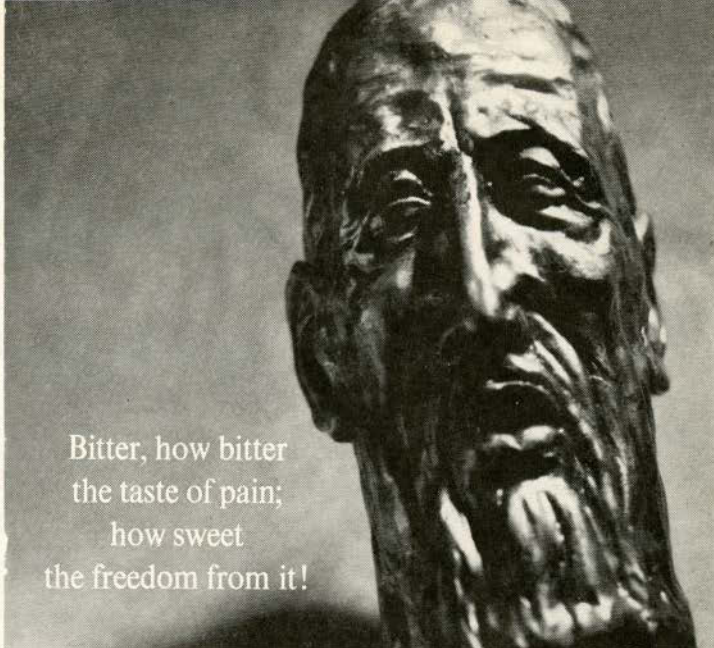


*Trademark
©Ortho 1969

ORTHO PHARMACEUTICAL
(CANADA) LTD.
Don Mills, Ontario

Devoted to research in family planning.

THE NOVA SCOTIA MEDICAL BULLETIN



Bitter, how bitter
the taste of pain;
how sweet
the freedom from it!

^N **292** [®]
TABLETS

Moderate to severe pain often calls for the decisive relief provided by 292 Tablets.

Each tablet contains:

Acetylsalicylic acid	3 1/2 gr.
Phenacetin	2 1/2 gr.
Caffeine citrate	1/2 gr.
Codeine phosphate	1/2 gr.

Dosage: One or two tablets as required.

Contraindications: Gastrointestinal ulceration or sensitivity to ingredients. Large doses taken for prolonged periods may induce nephrotoxicity or gastrointestinal disturbances.

Full information on request.

Ⓜ Narcotic; telephone prescription permitted.



NEED

Automobile Insurance
Physician Floater Insurance
Dwellings - Apartments Insurance
CALL

Thompson Adams
&
COMPANY LIMITED

423-1288

INCREASED BENEFITS STILL AVAILABLE

- (1) SUBSTANTIALLY HIGHER MONTHLY INCOME BENEFITS.
- (2) A BROADENED RANGE OF ELIMINATION PERIODS.

AVAILABLE TO QUALIFYING MEMBERS OF
THE MEDICAL SOCIETY OF NOVA SCOTIA.
UNDER THE SOCIETY'S DISABILITY
INCOME PLAN



Write or Phone:—

C. H. STUART
General Agent
429-6340

CLAUDE D. MacLACHLAN
Office: 423-7126
Residence: 454-0124

Paraduodenal Hernia

M. A. Naqvi, M.D., F.R.C.S.(C), D. S. Nathanson, M.D., F.A.C.S.,
J. A. Roach, M.D., C.M., W. J. Payne, M.B., D.M.R.D.

New Waterford, N.S.

Summary: *A case of left paraduodenal hernia causing intestinal obstruction is presented. The pre-operative diagnosis was made with the help of roentgenography. At laparotomy, the hernia was reduced and the sac closed. Intestinal obstruction due to paraduodenal hernia is a rare entity but it should be included in the differential diagnosis of obstruction. The diagnosis and treatment of this condition are considered with reference to the literature.*

The common causes of intestinal obstruction are external hernia and adhesions. Intestinal obstruction due to paraduodenal hernia is a rare occurrence, a total of 400 cases having been reported in the World Literature.¹

The purpose of this paper is to describe another case and to discuss the diagnosis and treatment of this condition.

Case Report:

E.H. No. 6941. A 17-year old boy was admitted to the New Waterford Consolidated Hospital, with the chief complaint of abdominal pain. His illness had started two days prior to admission with epigastric pain; it was colicky in nature and pronounced after eating his meals. An appendectomy for acute appendicitis had been performed four months previously.

Inquiry revealed that the patient had suffered from intermittent crampy abdominal pain with diarrhea, for two months; in between the attacks he was free of symptoms. There was no history of weight loss, loss of appetite, fatty food intolerance or recent trauma.

Physical examination showed him to be in moderate distress on admission. Blood pressure was 100/70 mm. Hg. The pulse rate was 80 per minute and respiratory rate 20 per minute. Temperature was 99°F. The only significant abnormalities related to the abdomen, which was slightly distended, and diffusely tender, the tenderness being more marked in the epigastrium. A well healed scar was present in the right lower quadrant due to previous appendectomy. There was no evidence of inguinal herniae. Bowel sounds were high pitched. The rectum was empty and not tender; no rectal masses were palpable. Liver, spleen and kidneys could not be palpated.

Laboratory studies disclosed the following values: Hemoglobin 12.5 gms./100 ml., hematocrit 40%, white blood cell count 11,500/cu.ml. with polymorphonuclear leucocytes 70%, lymphocytes 22% and 4% monocytes, serum sodium 144mEq/L, potassium 4.1mEq/L, chloride 109mEq/L, blood sugar 110mgm/100 ml., blood urea

nitrogen 18 mgm/100 ml., and serum amylase 50 King-Armstrong units. Urinalysis showed a specific gravity of 1.020. There was no albumin in the urine. X-ray flat plate of the abdomen revealed multiple dilated small bowel loops.

A tentative diagnosis of small bowel obstruction due to adhesions was made. Insertion of Cantor tube having failed, nasogastric suction with Levine tube was instituted. Intravenous therapy was started. Within a few hours patient moved his bowels and abdominal distension subsided. Trial of conservative management was therefore continued. Following complete disappearance of the obstruction, a gastrointestinal series with small bowel follow-through revealed that almost the entire small bowel was clumped together as if it lay in a bag (Figure 1). The stomach was displaced upwards

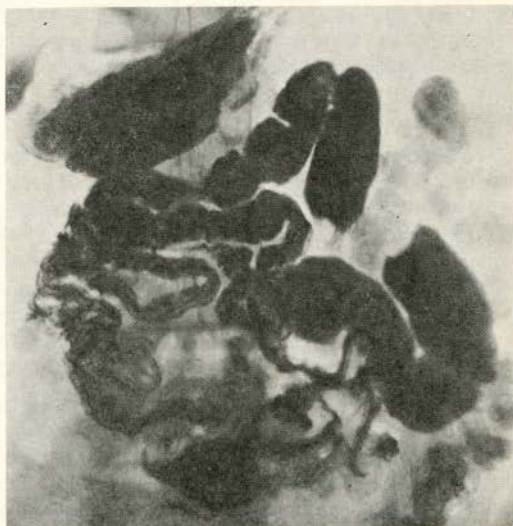


FIGURE 1

Barium roentgenogram of left paraduodenal hernia illustrating the following: 1) Intestinal coil appear clumped and lie as if in a bag, 2) axis of the ovoid mass of the bowel to the left of the midline, 3) absence of small bowel in the pelvis.

and small bowel was absent in the pelvis. There was some stasis in the small bowel with loss of motility and delay of barium passage. A radiographic diagnosis of paraduodenal hernia was made and patient underwent exploratory laparotomy through a paramedian incision. At operation the entire small bowel except distal 3 feet was encased in the hernial sac (Figure 2);

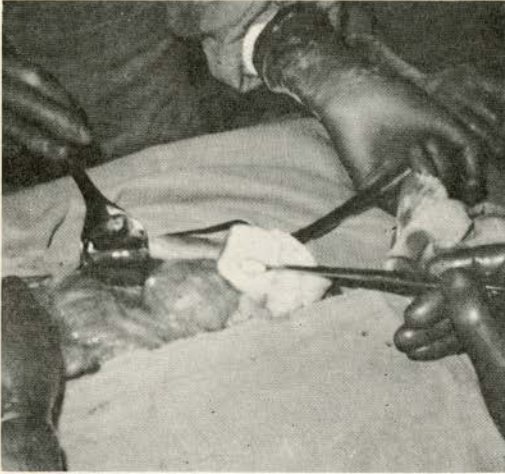


FIGURE 2

Operative photograph.
Note: Small bowel is encased in the hernial sac.

the small bowel entered the sac through the paraduodenal fossa. The inferior mesenteric vein was lying in the free anterior border of the sac. The transverse colon and mesocolon lay anterior to the sac. The hernia could be reduced easily and the sac was closed. The patient made an uneventful recovery and was discharged home on the 8th post-operative day.

Discussion

Paraduodenal herniae are congenital in origin and arise in various fossae around the duodenum secondary to variation in the peritoneal adherence, and to vessels in the vascular fold. Treitz in 1857 recognized that such herniae occur in fossae which are found normally.² His description was based on the finding of a vascular arch formed by the inferior mesenteric vein and the left colic branch of the inferior mesenteric artery along with the peritoneal layer forming a pocket, the opening of which was directed towards the duodenum.

Four duodenal fossae are of clinical significance: the superior and inferior duodenojejunal, the paraduodenal, and the retroduodenal. The superior and inferior duodenal fossae are formed by two layers of peritoneal folds running to the left from the region of the termination of the duodenum. The paraduodenal fossa is placed at the fourth part of duodenum and is produced by the inferior mesenteric vein raising up a fold of peritoneum, termed the paraduodenal fold (Figure 3,

diagram). This is the only fossa to the left of the duodenum capable of developing into a hernial sac. The inferior mesenteric vein always lies in the anterior margin of the orifice of the sac and is accompanied for some distance by the ascending branch of the superior left colic artery. The posterior fossa is a small pocket that passes behind the fourth part of the duodenum from its left margin.

The fossae responsible for right paraduodenal hernia are the superior, inferior and retroduodenal fossae. The fossa responsible for left paraduodenal hernia is the paraduodenal fossa. (Figure 3)

Diagnosis

Paraduodenal hernia is diagnosed by exclusion. The clinical picture produced by these herniae is variable. The condition is equally common in the male and the female. The age distribution varies from 3 months to 70 years. 50% of these herniae produce signs and symptoms of intestinal obstruction.³ 70-80% of patients exhibit an antecedent history of vague

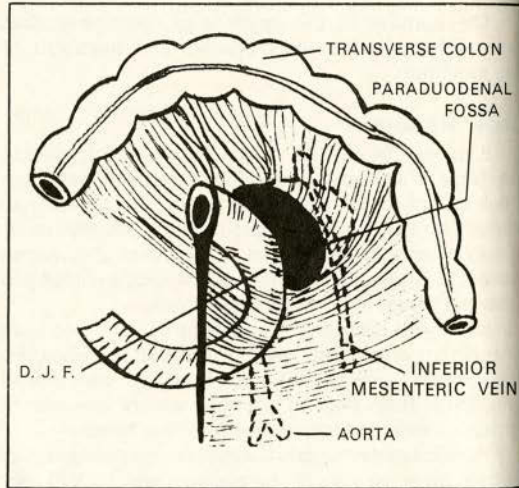


FIGURE 3

Diagrammatic illustration of paraduodenal fossa. D.J.F.—duodenojejunal flexure

bowel complaints.³⁻⁷ A significant symptom in the differential diagnosis relative to ulcer disease is the increase, rather than the decrease, in pain approximately thirty minutes following meals.^{6, 8}

The most important diagnostic sign is a localized palpable abdominal mass which is dull to light percussion and resonant to deeper percussion⁵; occasionally a distended intestinal loop may be palpable.

X-ray studies are of great help in questionable cases and in those with chronic symptoms. The important features are: (1) Intestinal coils appear clumped and

lie as if in a bag (Figure 1); (2) intestinal coil cannot be displaced from this circumscribed mass by any amount of manipulation or change in position of the patient¹⁰; (3) the axis of the ovoid mass of bowel loops is right or left to the midline depending upon whether the hernia is a right or left sided hernia. With the patient in the erect position, the body of the stomach tends to sag down to the left of the sac while the antrum and pylorus are not displaced.¹¹ The stomach rides high over the mass in the left-sided hernia. The small bowel is usually absent from the pelvis, but a part of the terminal ileum is always outside the sac and some of its loop may be in the pelvis. There is no clear space between the stomach and the mass in a right-sided hernia while there is clear space between the stomach and the mass in a left-sided hernia. The exit from the mass at times can be visualized by an abrupt change in calibre of the bowel as it emerges. There is stasis within the herniated bowel with a loss of motility and delay of barium passage.

Vascular obstruction may cause compression of the inferior mesenteric vein accompanied by development of haemorrhoids and with eventual venous congestion and infarction of the bowel. Strangulation of the entrapped bowel with or without volvulus may occur with bowel necrosis, perforation and peritonitis.⁹

Treatment

Reduction of these herniae by operative means is either very simple or very difficult. Since the inferior mesenteric vein and branch of the left colic artery lie in the free edge of the sac in left paraduodenal hernia, and the superior mesenteric or ileocolic artery lies in the free edge of the os of the sac in right paraduodenal hernia, care must be taken not to injure these vessels. If the hernia cannot be reduced easily, then the anterior peritoneal wall of the sac should be opened and any adhesions divided^{12, 13}; after decompression of the bowel with needle or trochar and reduction of the herniated content both by compression from within as well as traction from without, either the hernial defect is closed or the entire wall is resected.^{5, 6, 7}

The results of surgery have improved directly with earlier diagnosis and improved pre-operative, operative and post-operative care. The high mortality (50%) re-

ported in earlier literature was due to early development of strangulation, obstruction in some 60% of cases followed by infarction of bowel and its sequelae.^{14, 15} Recurrences following surgical correction have not been reported.¹ □

References

1. Jones, T. W.: Paraduodenal hernia and Hernia of foramen of Winslow in Nyhus, L. M. and Harkin, H. N. (eds.): *Hernia*, Philadelphia, J. B. Lippincott & Co., 1964, p. 590.
2. Treitz, W.: *Hernia retroperitonealis*, Prague, F. A. Credner, 1857.
3. Collins, D. C.: Right paraduodenal hernia: Surgical Repair, Recovery, Case Report, *Western J. Surg.*, **47**: 250, 1939.
4. Arnold, I. A.: Hernia into the paraduodenal fossa with obstruction due to large biliary calculus. *J.A.M.A.*, **112**: 1245, 1939.
5. Deaver, J. B. and Burden, V. G.: Right Paraduodenal Hernia, *Surg. Clin. of N. America*, **9**: 1015, 1929.
6. Lamphier, T. A. and Covina, J.: Paraduodenal Hernia, *New York J. Med.*, **61**: 3332, 1961.
7. Tesson, J. A.: Left paraduodenal hernia, *Am. J. Surg.* **93**: 470, 1957.
8. Manfredi, D. H.: Paraduodenal Herniae, *New York J. Med.*, **52**: 1171, 1952.
9. Cortese, T. A. and Cortese, J. V.: Strangulated paraduodenal hernia complicated by Volvulus, *J. Int. Coll. Surg.*, **12**: 69, 1949.
10. Exner, F. B.: The Roentgen Diagnosis of right Paraduodenal hernia, Report of a case with Survey of the Literature, *Am. J. Roentgen*, **29**: 585, 1933.
11. Parsons, P. B.: Paraduodenal herniae, *Am. J. Roentgen*, **69**: 563, 1953.
12. Averbach, B. F.: Right Paraduodenal hernia, *Am. J. Surg.*, **35**: 128, 1937.
13. Cogswell, H. D. and Thomas, C. A.: Right Paraduodenal hernia, *Ann. Surg.*, **114**: 1035, 1941.
14. Campanale, R. P. and Cavanagh, M. J.: Left Paraduodenal hernia, *Am. J. Surg.*, **91**: 436, 1956.
15. Lahey, F. H. and Travor, W.: Right paraduodenal hernia, *Ann. Surg.*, **122**: 436, 1945.
16. Peltokallio, P. and Kalima, T. V.: Left paraduodenal hernia, *Am. J. Surg.*, **151**: 367, 1968.

Acknowledgement:

The Authors wish to thank Mrs. Kathleen Macdonald, Mrs. Rae Naqvi and Sister Marie Kelly for preparing the Manuscript.

NOTICE TO MEMBERS

Due to requests for Back Copies of *The Bulletin* our office is short of the following issues from 1969: February and October.

Would any Member who has a spare copy kindly forward it to: The Medical Society of Nova Scotia, Sir Charles Tupper Medical Building, University Avenue, Halifax, N.S.

Methaemoglobinaemia

E. A. Day, M.D.*

Halifax, N.S.

The role of a regional Poison Control Centre such as that at the Izaak Walton Killam Hospital for Children, Halifax, is frequently substantiated. The following case is presented as an example of the value of a Poison Control Centre.

Case History

A 5-year old boy was brought to the Out-Patient Department of the Izaak Walton Killam Hospital for Children by his mother because of extreme pallor and cyanosis. He was immediately taken to the Emergency Room, where he was noted to have an ashen grey pallor and cyanosis of the lips, mucous membranes, and nail beds. His blood pressure was 90/60 mm.Hg., pulse 108/min. and regular, and respiration appeared to be normal. The boy was drowsy, but the examination otherwise was unremarkable. Analysis of the blood, however, showed that it had a chocolate-brown colour: the haemoglobin was normal.

The mother, who was under psychiatric care, stated that the patient and his brother had both been found in her medicine cupboard earlier in the day. All bottles appeared to be intact except one containing sodium nitrate: parts of capsules of this drug found lying about indicated that this was the agent ingested.

Methylene Blue, 1% solution, injected intravenously at a dosage of 1-2 mg/kg brought dramatic improvement.

The younger brother was brought to hospital and found to be suffering from the same disorder.

Comment

The diagnosis of methaemoglobinaemia is primarily clinical, but it is readily confirmed by spectrophotometry or by starch block electrophoresis of hemolysates.

Acquired methaemoglobinaemia is caused by contact with certain drugs and chemicals which preferentially oxidize haemoglobin and overcome the normal reducing mechanism of the erythrocytes. Iron in the haemoglobin molecule is then in the ferric state and is incapable of transporting oxygen.

Recognizable cyanosis results when a level of 15% methaemoglobin is reached. Levels below 20% are generally not associated with symptoms, while concentrations of over 40% cause weakness, tachycardia, confusion, and coma: death may ensue.

The list of agents causing methaemoglobinaemia includes certain sulfonamides (prontosil, sulfathiazole, sulfapyridine), aniline dyes and some derivatives (acetanilid, phenacetin), chlorates, nitrites and nitrates, the last being contaminants of well water in areas heavily fertilized.

Rapid improvement follows treatment with reducing substances, notably methylene blue, and, less effectively, ascorbic acid.

* Formerly Resident in Paediatrics, Izaak Walton Killam Hospital for Children, Halifax, N.S.

Compliments of

The CAMEO RESTAURANT Ltd.

The Prestige Restaurant of Halifax

Established 1929

5511 Spring Garden Rd.

Good Genes and Bad: Population Genetics and Health[†]

Richard F. Shaw, Ph.D.*
Halifax, N.S.

Summary: *Population genetics, a dynamic approach to the study of populations, is introduced in relation to concepts of fitness and morbidity. The ways in which sickle cell disease, cystic fibrosis, and diabetes, as hereditary diseases, are developing within populations can be understood by utilizing population genetics. This approach has importance for the physician because it increases the knowledge of the natural history of these diseases and thereby permits more accurate statements on prognosis to be made. Through the use of population genetics, genetic screening programs and research into treatment and heredity counseling may also be aided.*

Population genetics, a relatively recent method of studying populations, is essentially a dynamic approach utilizing genetics as the basic tool. While it does deal with the numbers and distribution of genotypes, especially abnormal ones, within a population, it is not concerned with the mechanisms of genetic transmission nor with the biochemistry of gene action. Rather it deals with the descriptive aspects of populations, and attempts to relate its essential findings to matters of medicine and health.

Its relationship to the practice of medicine can be understood most readily if the traditional approach to medical genetics is first considered. This approach is two-fold. First, one looks at the way in which a disease is distributed in families in order to decide what kind of inheritance might be at work. If one can say that the familial pattern is well explained by autosomal recessive or sex-linked dominant, or some other describable mode of inheritance, an important question has been answered, and we consider the formal genetics of the disorder to be understood. Second, one studies the abnormal genotypes by laboratory methods in order to locate the molecular lesion and to elucidate connections between this and the phenotypic consequences that result in a sick person. For example if we show that the enzyme phenylalanine hydroxylase is lacking, and that consequently brain function is somehow disrupted (which is the situation in phenylketonuria) we have an answer to this second question.

The dynamics of hereditary disease depends heavily on what public health statisticians call morbidity. In fact, in medical population genetics the approach is to study individuals in order to see how much morbidity they show. Many population geneticists would be surprised to hear this, because morbidity is not ordinarily thought to be a genetical concept; nevertheless, morbidity is a key concept in population genetics. Although we are not specifically or directly interested in morbidity

it is important in connection with fitness (or, to be precise, darwinian or reproductive fitness). Indeed, fitness and morbidity are closely related. The pertinent difference is that the concept of fitness is not concerned with whether a person is well or ill; it is concerned with how successfully he reproduces. Thus, much of the reduced fitness of abnormal genotypes arises because the individuals look ill or die prematurely; if a person looks ill he is likely to be less marriageable. And if he dies, this puts an end to his opportunities for reproduction. This is obvious for an adult who dies before producing all the children he otherwise might, but of course it is true also of younger people including those who die before reaching reproductive age, or even before birth.

Fitness in population genetics is important in the following way. If the measurements of fitness for genotypes AA, Aa, and aa are known and if certain population frequencies for these genotypes are also known or assumed, the frequencies to be expected in the next generation can be calculated. These changes can be calculated over many generations, as can the final set of genotype frequencies at the end of a given period. This kind of result may be represented by plotting the frequency of an abnormal gene against time: in one instance it may increase, in another it may decrease, while in yet another, it may go to some intermediate value and stabilize there, regardless of whether it was high or low at the start.

Now real populations may be changing, but often they must be stabilized at some intermediate gene frequency. For example, the **ABO blood type system**. This array of genetic types or *polymorphism* is universal

[†] Adapted from a talk to the Dalhousie Medical Research Association.

* Lecturer, Department of Preventive Medicine, and Assistant Professor of Paediatrics, Dalhousie University, Halifax, N.S.

in the human species in all parts of the earth, and is apparently very old. Its persistence suggests the existence of an equilibrium system even though the equilibrium state is somewhat different from one population to another. Formerly it was thought that the genes for the blood types were wholly neutral in their effect on fitness; the present view is that polymorphic systems are kept up by a balance of forces. What kind of forces may be at work in the ABO system is poorly understood, but it appears that there are differences in survival of fetuses of different genotypes.

Some polymorphisms in man do appear to be quite old: for example, the ability to taste phenylthiocarbamide (PTC). This is a single-gene trait in man, and the incidence of non-tasting ability is said to be 30%. This is interesting because, in the chimpanzee, the incidence of non-tasters is similar, being 26%. Whatever the details of how the two alleles are kept in the population, it seems that a balanced system of this kind has persisted over a long period.*

Study of simple problems in experimental organisms has led to the realization that a major factor in maintaining polymorphisms is superior fitness of the heterozygote, or *heterosis*. More recently, examples of this phenomenon have been demonstrated in man. One such example is sickle cell anemia; analysis of this disease helps us to understand the basic principle which probably explains the genetic equilibrium in the ABO system and PTC Taste as well.

Sickle Cell Disease

With respect to the alleles HbA and HbS, there are three genotypes, HbSHbS, HbAHbS, and HbAHbA. Individuals of genotype HbSHbS possess red blood cells that have hemoglobin S rather than the normal adult form of hemoglobin, hemoglobin A. Under the low oxygen tension of the capillary circulation such erythrocytes become distorted (sometimes to the shape of a sickle). They block capillaries, are destroyed at a greater than normal rate, and in consequence give rise to sickle cell anemia. The survival rate of the victims is low, and hence the fitness of the genotype near zero.

The red cells of the heterozygote, however, have both hemoglobins A and S. The cells of such individuals sickle, but the other symptoms of the disease are not produced. Furthermore, such HbAHbS individuals are not only healthy: in a malarious environment they are healthier than the normal HbAHbA persons. (An example of negative morbidity). This is due to the fact that erythrocytes containing hemoglobin S provide an inhospitable environment for *Plasmodium falciparum*. The result of such heterosis is that the HbS gene reaches an intermediate equilibrium frequency and stays there. This explains why, in Africa where falciparum malaria is common, the frequency of the HbS gene is so high. It reaches a frequency of 20% over large areas of Africa and is common in other places where that kind of malaria has been prevalent: in Greece, Turkey, Arabia, and India. In the sickle cell gene the superior reproduc-

tivity of the heterozygote is sufficient to overcome the almost complete lethality of the genotype HbSHbS; and the gene has become common in these regions in spite of very severe reduction in fitness in the homozygote.

Cystic Fibrosis

While the molecular basis of cystic fibrosis is not understood the formal genetics is clearly established. The genotypes are CC, Cc, and cc, the last of the producing the disease, which until recently was uniformly fatal in childhood. The fact that the gene should continue to exist in the population in spite of such severe effect on fitness is not too mysterious. Gene have finite mutation rates and in every generation some genes must go from the state C to the state c by mutation. But cystic fibrosis is the most common lethal hereditary condition in man (except that it is no longer necessarily lethal) and the process of mutation seem wholly inadequate to account for its high frequency unless we suppose a higher mutation rate than ever found before. More likely the carriers, Cc, show heterosis. Recent attempts to measure this have, in one study, suggested that individuals of genotype Cc produce about 4/3 as many children as do normal Cc people. Would this not account for the high frequency of the disease? It would indeed, and in fact calculations show that if this fitness value is correct, the frequency of the disease must still be increasing. Where would it stabilize?, what will happen if medical treatment increases the survival rate of the children with cystic fibrosis to say, 80%?: these are questions of population genetics. Under various assumptions answers to them can be calculated. Just to give one example, the above value is sufficient to cause a rise in the frequency of cystic fibrosis from 400 per million in caucasian populations to 480 in the next generation.

Diabetes

The genetic mechanism for diabetes is not known with any degree of certainty. There is evidence to suggest that there are three genotypes, DD, Dd, and dd, the last of these being the genotype of the diabetics. Although the fitness of diabetics has changed markedly since the introduction of insulin, fitness values of diabetics before this period can be assessed. Probably we would want to have some idea of whether heterosis is present as well, and if so, how much. Given values for these affects, it can be asked whether the frequency of diabetics present in the population is a reasonable consequence. If calculations showed that the fitness values ought to have led to 90% of the population being diabetic, or to only .01%, we might conclude that the proposed simple genetic mechanism for diabetes was too simple, and unacceptable.

The same approach could be used for **schizophrenia** and other disorders that seem to be hereditary but for which the exact mode of inheritance has been hard to specify. For schizophrenia a mode of inheritance has been postulated very much like the one mentioned for diabetics, although there is some evidence of

*alleles: alternative forms of a single gene.

determination by two pairs of genes. Although agreement of a mathematical model with the reported findings would probably not prove either view, at least there are then two chances to disprove something. It may seem poor progress to merely discard one or another of the various modes of inheritance that have been attributed to these diseases, but in difficult areas even small advances in understanding are acceptable.

Measurements on fitness of diabetes and schizophrenia are hard to collect; information of this sort is tedious to obtain, and little is available on these diseases. Yet, surprisingly, the same holds true for conditions in which the diagnosis presents no difficulty, and in which the motivation for collecting information might be stronger because the mode of inheritance is exactly known. In North America where falciparum malaria has never been common, the frequency of the sickle cell gene must have been declining for as long as the Negro population has been here. But this decline is difficult to calculate because not enough is known about the survival rate and family size of people with sickle cell anemia.

This is apparently because our society has not been much concerned with hereditary traits affecting the health of Negro children, although mortality from heart attacks among middle aged statesmen and industrialists has caused a great outpouring of funds for studies of heart disease. There is perhaps also a preference for studies that sound bizarre or at least dramatic and require a prominent investigator, or better yet a team headed by such a person, to go to an outlandish place. This is the moonshot psychology applied to medical research. Certainly it is more interesting to read in the newspaper that Professor Black, the Nobel Prize winner, is going to the upper Nile with two helicopters and a river boat to study a little-known tribe said to practice cannibalism than to read that Dr. White of Ann Arbor is going to Detroit to study Americans. The possibility of expeditions has at least an entertainment value. But it also partly accounts for the fact that as much is known about fitness and the sickle gene in tribes of East Africa as among Negroes in North America.

There must be other less reprehensible reasons as well for the dearth of information on fitness. For example in cystic fibrosis the fitness value for the carriers has been long in coming only because it is hard to measure. But whatever the reasons, we know very little about fitness. This gap in knowledge is especially striking in the case of sickle cell anemia, because of the detailed knowledge now available on the sickle cell gene, and the abnormal protein that it causes. The number of amino acids in normal and sickle hemoglobin, and their exact sequence in each, is known. The genetic code understood, the sequence of base pairs in the messenger RNA and in the DNA of the gene itself is almost completely understood. Indeed, our understanding of these sequences would be complete except for the fact that there is inherent ambiguity in trying to read the sequence of bases in the gene when we are given the amino acid sequences in the product. (The valine residue in hemoglobin S for example can be coded by any one of four triplets, GUU, GUC, GUA, or GUG.) We thus have something approaching ultimate knowledge about the molecular basis of sickle cell anemia, but virtually none about the effect of the sickle gene on infant mortality, life span, and family size.

In the phraseology of the geneticist we say that we have poor information on fitness. The worker in public health describes the same situation by saying we have poor information on morbidity and mortality. Whichever terminology is used it appears that while much support has been given to studies of molecular biology, little has been given to population aspects of hereditary diseases. This is a matter of practical importance to the physician because, to the degree that we lack information on morbidity, we also lack information on the natural history of diseases. Thus we are unable to make good statements on prognosis. It is a matter of importance to government agencies concerned with health because, lacking information on both morbidity and frequency, we are unable to set priorities in the development of programs for genetic screening of the newborn, for early detection in diseases of later onset, and in research relating to treatment and heredity counseling. □

F. GORDON ROBERTSON, C.L.U.

NORTH AMERICAN LIFE ASSURANCE COMPANY
TAX DEDUCTIBLE SAVINGS PLANS AND IMMEDIATE ANNUITIES
Representative for Medical Society Group Plans

Bank of Canada Bldg.
1583 Hollis St., Halifax

Phone: Office 423-7144
Home 423-2198

Community Help: The North Preston Clinic

J. P. Savage, M.D.

Dartmouth, N.S.

Summary: *The development of a medical clinic in a rural community of Nova Scotia is described. Some of the problems of medical care in isolated social groups are discussed, particularly in relation to the social needs of the community. Such a medical clinic satisfies a great need in a previously neglected community. Its true contribution will only be recognized when there is improvement in social conditions as well as medical.*

In November 1968 a medical clinic was started in North Preston, a community previously lacking in medical help. Now that this clinic has demonstrated its worth, it is appropriate to consider some of the lessons which have been learned since its opening.

North Preston is an isolated community of black Nova Scotians numbering about 1,400 in all, which forms part of the largely black settled community outside Dartmouth, Nova Scotia, consisting of North Preston, East Preston, and Cherrybrook. It differs from the rest of Preston in that it is a "dead-end" community situated about 3 miles from the main road, Route 7; this geographical difference has contributed greatly to the difference in social conditions which exist in this neighbourhood. Somewhat isolated, this area has suffered from significant social and medical neglect; with deplorable housing conditions, a virtual absence of piped water and sewerage, and with about 80% of the population on some kind of assistance, local conditions must be among the worst in the province. Before the clinic opened, no medical assistance was available in the area, the nearest doctor being in Dartmouth, some 7 miles distant. Apart from an immunization clinic run by Dr. R. Cameron of the Atlantic Health Unit, the usual health contact was with the out-patient departments of the Halifax hospitals. Antenatal care and delivery was provided at the Grace Maternity Hospital; however, due to their geographical isolation, many women delayed their first contact with the hospital until they were in labour. Despite the efforts of an active Social Development Officer, the morale of the residents of the North Preston area was extremely low, presenting an alarming example of the powerlessness of poverty.

My first contact with this community came through the interest of a local priest, and I soon became aware of the tremendous work being done on a limited budget by the Social Development Officer, Mr. Calvin Ruck. Concern about this area had also been expressed by Dr. R. Cameron, and by Dr. S. Keet, of the Izaak Walton Killam Hospital, Halifax. After considerable negotiation with Dr. Cameron, it was decided to set up a medical

clinic to be operated once weekly by a group of local general practitioners with the help of public health nurses. Much help and encouragement from several groups brought the clinic to reality, notably that of Dr. R. B. Goldbloom and doctors of the Izaak Walton Killam Hospital, Halifax County Council authorities, and the Social Development Centre, in which the clinic was located.

On its first afternoon some 30 patients were seen. Each time between 30 and 80 people have been seen by two doctors from the Izaak Walton Killam Hospital, Halifax, a qualified paediatrician, and a general practitioner. Work at first was conducted in three rooms under what at best can be described as difficult conditions, which throughout the week are used for other activities of the Social Development Centre; however, one room, kept locked, is now reserved as a medical room. Equipment, non-existent to start with, accumulated, an examination couch being obtained from the Grace Maternity Hospital, other equipment being donated by local charities after some initial publicity. Drugs were provided initially by the Halifax County Council, who have continued to supply them through a local pharmacy; drug firms have also been generous in supplying antibiotics, vitamins and mineral preparations, among others, free of charge. The cost of running the clinic has thereby been kept relatively low.

From the outset it was obvious that a main function of the clinic was to act as a referral centre for further investigation. Our task in this respect has been made easier by the generous co-operation of the booking departments of the Victoria General and Grace Maternity Hospitals, by the Public Health Nurse of the time, Miss Shirley D'Entremont, and by Mr. John McNeil, a most humane and co-operative social worker whose concern for the people shone through all his actions. Continuous domiciliary contact and referral of people to the clinic by these two individuals was of inestimable value. Transport was provided by the Halifax County Council so that patients could reach the Halifax hospitals.

The medical work has been varied and the value of services such as eye care and dentistry have been proven; an index of the significance of eye clinics, for example, is that over 60% of those who have been examined have been assisted in obtaining glasses by the Halifax County Council. Emergency dental work has also been paid for by the Halifax County Council, the work being done by neighbouring dentists; the lack of adequate equipment should be remedied in the near future. The Atlantic Health Mobile X-ray Unit attended on one occasion, considerable publicity resulting in a good community response.

An analysis of the diseases encountered reflects the prevailing social conditions in the community and the ethnic aspects of disease among black people on the North American continent. Obesity is common, partly related to the high-carbohydrate, low-protein diet dictated by poverty; an attitude of hopelessness and an absence of a regular work pattern reflect the position black people find themselves in. As to diseases of specific origin, roundworm infestation and endemic meningitis were of particular interest. Roundworm infestation reached an incidence of almost 100%; at first every effort was made to treat all who presented with this infestation: however, it soon became obvious that people were returning to their same insanitary patches and that they would re-attend one month later with exactly the same problem, and that no amount of medical treatment would result in improvement of their condition. The environmental conditions, with re-infestation of drinking water on a cyclic basis, prevented such medical treatment from achieving its goal; social advancement on all levels and cooperation with all in the area who now seem resolved to improve the lot of this unfortunate community are certainly as necessary as medical help. An endemic of meningitis early in 1969, in which one child died and 36 carriers were detected, provided another example of socially-induced disease.

What then are the main points to be learnt from this venture? First, this has been a team approach. The doctor, the social worker, the dietician, but most of all the public health nurses, have been altogether respons-

ible in a team effort for any success that has been achieved so far. Our acceptance by the community has been excellent, due primarily to the tact and hard work so typical of the nurse. Second, the good that any medical clinic can do in an area such as this is closely linked to the social advancement of the community; although a clinic can obviously be of great value, its real work can only be assessed when it is considered in the light of housing, sanitation, and other social advances and needs. Certainly a clinic of this kind does bring into focus the many problems of such an area. As an example, it is now proposed to form a North Preston Medical and Child Care Society, which would incorporate the health clinic but also a day-care centre and child nursery. Fully one third of all children in this area are of "one-parent" families, and the general Nova Scotian lack of day-care centres is nowhere better seen than in this community.

One other point should not be overlooked. This is the worth of a clinic such as this to the medical profession, which must, as a clear responsibility, consider undertaking where ever necessary, programs of medical care in disadvantaged communities. Otherwise programs may be dictated by government authorities. It is in this sense that freedom of practise will best satisfy the needs of profession and community.

In conclusion, it is a pleasure to acknowledge the debt I owe to Drs. Niels Hansen and Anthony Lamplugh of the Dartmouth Medical Centre, without whose assistance this venture would never achieved reality; to Dr. R. F. Hand for his contribution to the eye-clinics; to Dr. Henry Ross for his support and encouragement; to Dr. R. B. Goldbloom and doctors of the IWK Hospital for their particular support; to Dr. R. Cameron of the Atlantic Health Unit and Mrs. Acres of the Public Health Nurses organization; to Mrs. Johnson and some of the ladies of North Preston who contributed secretarial work. Finally through their continued financial support, the Halifax County Council has seen the clinic through a time of difficulty, while the Social Development Centre has housed us during the time that the clinic has been operating. □

A NICE PLACE TO STAY . . .



The LORD NELSON

Halifax
Canada

Area Code 902 — 423-6331

Telex 014 — 422866

Home Care of Chronic Respiratory Disease

Summary: *In an effort to reduce the number of hospital readmissions or prevent permanent hospitalization of patients with chronic respiratory insufficiency, a Home Care Program was established 11 years ago by the Winnipeg General Hospital. Paramedical personnel play an important role in the successful operation of the program at low cost.*



In 1958 the Winnipeg General Hospital (Manitoba, Canada) established a "Home Care Program" for patients with chronic respiratory insufficiency. It was hoped that repeated hospital admissions or permanent hospitalization for such patients would prove unnecessary. This report is concerned with the experience during the first 10 years.

Patients with repeated hospital admissions over a period of years or with persistent hypoxia and hypercapnia, despite intensive therapy, were given high priority for admission to the program. The suitability of the patient was judged by his medical history and physical status, respiratory function, home and family situation, and medical and paramedical requirements.

During the 10-year period the 148 admissions spent a total of 71,247 days on the program. The average was 482 days. There were 70 deaths (47 per cent). The average length of time on the program of those who died was 361 days.

Of 14 patients admitted to the program between 1958 and 1962, only one is alive at the time of this report. Of 39 admitted between 1963 and 1965, 15 (48 per cent) are still alive.

Rehospitalization was required for 82 patients, or 55 per cent. However, the total hospitalization of these patients was 4,078 days, and they were on the Home Care Program only 5.7 per cent of this time.

Cost of Program

The cost of the program for one year (1967) was \$15,262.69. The cost per patient per year was \$193.20, or 53 cents a day. The costs include maintenance of equipment and administration as well as physicians' and nurses' fees, homemaking service, transport, meal delivery, and oxygen. In Winnipeg this annual cost would cover only four or five days in an acute-care hospital bed, seven to eight days in a chronic-care hospital, and 10 to 12 days in a nursing home.

Reuben M. Cherniack, M.D.; Robert G. Handford, M.D., and Edith Svanhill, *The Journal of the American Medical Association*, May 5, 1969.

Reprinted from the Abstracts of the National Tuberculosis Association, September, 1969. Printed through cooperation of the Nova Scotia Tuberculosis Association.

Financing of the program is from funds of the Manitoba Hospital Commission and from a provincial government rehabilitation health grant. A few patients may be asked to contribute to the cost on the basis of their reported taxable income, but this is rare. Intermittent Positive Pressure Breathing (IPPB) equipment is loaned to the individual patient from a central pool operated by the provincial government.

Patients thus far admitted to the study were all suffering from a chronic illness, principally respiratory, cardiac, neurological, or malignant disease.

The program is administered by a medical director or secretary, and a nursing coordinator who serve as a "health team" in providing the medical and paramedical services required by the patient. The team has responsibility also for the dissemination of reports to and from other agencies active in the program.

In 1967 nurses of the Victorian Order of Nurses made 1,560 visits to the patients at home. Reassessment of the patient's condition was made at intervals of from two to six months in the outpatient clinic of the hospital. When necessary, the resident physician assigned to respiratory diseases visited the patient at home.

Other Services

Provision is also made for the services of such other paramedical personnel as inhalation therapists and physiotherapists and, where called for, a homemaker to assist the family. Although the majority of patients go to the hospital for physiotherapy, a physiotherapist on occasion may visit the home. Regular communication is maintained with patients who live in the country some distance from the hospital.

In the care of chronic respiratory disease patients the measures used have been designed primarily to mitigate functional disturbances and to prevent exacerbations of acute respiratory insufficiency. The majority of these patients had chronic obstructive pulmonary disease. Among them resistance to airflow was a major problem, probably due to secretions, loss of elasticity, and/or bronchospasm. Care of these patients has been directed at reducing the work of breathing, increasing alveolar ventilation, and improving exercise tolerance.

Reduction in secretions was accomplished by removal of irritants, particularly cessation of smoking; by saline douches of the nasal passages in patients with

postnasal discharge; and by prompt and vigorous treatment of infection.

By adequate hydration and postural drainage, elimination of secretions was improved. Bronchospasm was relieved by effective oral and aerosol administration of bronchodilators. For many patients with chronic obstructive lung disease who were unable to take a deep breath and had inadequate alveolar ventilation persistently, IPPB was provided at home.

Increased Mobility

Diaphragmatic breathing training was a part of the program, as was gradual increase in physical activity. Although excessive physical activity was avoided during an acute illness, invalidism was discouraged. General physical fitness improved with reasonable physical activity through gradually increased exercise. This ability to increase mobility and exercise tolerance improved mental outlook.

Although it is disappointing that the life span of the patients on the program was not longer, it must be

emphasized that the prerequisites for admission were stringent. The real benefits cannot be deduced from the number of hospital readmissions and the mortality statistics. Several patients with severe insufficiency were sent home even though it was realized they might have to be readmitted to the hospital. In several instances, patients were discharged from the hospital to spend their last few days at home.

Care of the patients was primarily centered around paramedical services rather than medical. The cost of home visits by residents was only a small part of the total cost of the program. Paramedical personnel should certainly be considered an integral and essential component of the management of patients with chronic respiratory insufficiency.

The program made prolonged stays in the hospital unnecessary, and likewise long confinement in nursing homes or extended care institutions. The patient and his family responded to the opportunity for him to remain in comfortable and familiar surroundings during the late phases of his illness. □

DEBENTURES--

THE 'WORRY-FREE' INVESTMENTS

...because they're secure, and The Eastern Canada's Debentures pay a very high interest rate! Buy them and forget them . . . they're busy earning interest even when you're asleep . . . and there's no need to watch the paper every day to see what they're "doing". The Eastern Canada's Debentures are solid . . . and very, very profitable. The Eastern Canada Savings and Loan is federally incorporated, a member of the Canada Deposit Insurance Corporation, and has been serving Maritimers since 1887. There are branches in Halifax, Fairview, Dartmouth, Kentville, Charlottetown, Moncton, Fredericton, Bathurst, and two in St. John's. May we serve you, too?

The
EASTERN CANADA
Savings and Loan Company

Federally Incorporated - Established 1887

Member: Canada Deposit Insurance Corporation

HEAD OFFICE: 1819 Granville Street, Halifax, N.S.

Rupture of the Uterus[†]

Maternal Mortality Studies*

Summary: *A maternal death was reviewed by a Provincial Committee on Maternal Welfare. The pathological cause of death was shock from hemorrhage due to uterine rupture. The preventable factors are discussed.*

A 33-year-old mother of eight children was pregnant for the tenth time and her expected date of confinement was March 30, 1962. She first consulted her physician when she was two months pregnant. Her blood pressure, weight gain and urine were normal on 10 subsequent office visits during the remainder of the pregnancy.

On March 22, her membranes ruptured spontaneously and she was admitted to hospital. During March 22 and March 23, she had some irregular uterine contractions. As labour had not begun at 10:30 a.m., March 24, a medical induction was started using 3 minims of oxytocin (Pitocin) subcutaneously every 20 minutes for six doses. The last dose was given at 12:30 p.m. At 1:00 p.m. the patient felt well, and examination at this time by the attending physician revealed that the cervical os was closed.

At 1:20 p.m. she suddenly experienced severe uterine contractions associated with left lower quadrant pain and moderate vaginal bleeding. The caput was now visible at the vaginal introitus, and a healthy 7 lb. 10 oz. female infant was delivered at 1:30 p.m. with low Simpson forceps under trichloroethylene (Trilene) anesthesia. The placenta followed without incident and a small episiotomy was repaired.

Approximately 10 minutes after the delivery of the placenta, the patient suddenly vomited, complained of severe pain in the left lower quadrant of the abdomen, and went into shock. Examination at this time revealed that the uterus was high in the right upper quadrant and the patient's blood pressure was 60/0 mm. Hg. A plasma infusion and a metaraminol tartrate (Aramine) drip were started intravenously. A consultant anesthetist and a consultant surgeon saw her shortly after shock developed. They agreed that rupture of the uterus had occurred and recommended an emergency hysterectomy.

At 4:00 p.m., with blood transfusions running, a laparotomy was performed. There was massive intraperitoneal hemorrhage and a hematoma of the left broad ligament. Retroperitoneal hemorrhage extended superiorly to the left kidney. A uterine rupture involved the left side of the cervix and the uterus, and extended into the vagina. The uterine fundus and part of the cervix were removed. Owing to the severity of the shock, there was practically no bleeding from the freshly cut tissues during the operative procedure. The left uterine vessels were difficult to isolate because of the

distortion of the anatomy; however, they were identified and ligated. At the completion of the operation the surgeon felt that hemostasis was complete, but he was concerned that, since the patient's blood pressure was absent during the operative procedure, some potential bleeding sites might not have been ligated.

At 6:30 p.m. the patient became apneic and was thought to have expired. Intubation and artificial respiration and additional blood given under positive pressure restored spontaneous breathing, but the peripheral pulse and the blood pressure could not be detected.

At 11:00 p.m., 10 hours after delivery and seven hours after initial surgery, despite 13 units of whole blood, the patient's condition had further deteriorated, the abdomen was more distended and continuing intraperitoneal hemorrhage was suspected. She was returned to the operating room and a repeat laparotomy was performed at 11:30 p.m. March 24. At this operation additional massive retroperitoneal and intraperitoneal hemorrhage was found. The tissues in the left pelvic wall were markedly edematous and infiltrated with blood. The left pelvic peritoneum was reopened, the blood clot was removed and the area was resutured. At the end of this procedure no further fresh bleeding was obvious.

Following this second operation the patient failed to improve, despite further transfusions given under positive pressure. She died at 5:37 a.m. March 25, 16 hours after the delivery and six hours after the second laparotomy.

A complete autopsy was performed. The abdomen contained several litres of blood and there was an estimated two litres of retroperitoneal blood clot in the left pelvic wall. The exact site of the bleeding could not be identified, but it was in the region of a 15-cm. sutured tear in the left broad ligament.

Decision of Committee on Maternal Welfare

The subsequent conclusions reached by the Provincial Committee on Maternal Welfare were as follows: "This was a preventable direct maternal death. The professional factors were: There was injudicious use of

[†]Reprinted by permission of C.M.A. Committee on Maternal Welfare, and reproduced here at the request of the Committee on Maternal and Perinatal Health, Medical Society of Nova Scotia.
*From *C.M.A.J.* 94:190, 1966, by kind permission, Editor, *Canadian Medical Journal*.

subcutaneous oxytocin to induce labour in a grand multipara. The ligation of the left internal iliac vessels might have changed the result in this patient. This maternal mortality has been considered to be ideally 'preventable' under the terms of reference of the Provincial Maternal Welfare Committee, and there is no implication of any negligence."

Discussion

The examination of the block section of the pelvis viewed after the autopsy suggested that death was due to hemorrhage from vessels in the left broad ligament. This was the result of a tear in the left side of the cervix and uterus and was due to the rapid, violent labour initiated by the injudicious subcutaneous use of oxytocin in a grand multipara (a woman who has had seven or more pregnancies which resulted in viable offspring).

A grand multipara should rarely, if ever, be given oxytocin in any form to initiate labour because of the well-known association of this method of induction

and rupture of the uterus. When this drug is used for induction of labour in any patient, it should only be given as an intravenous oxytocin infusion, using 5 units of oxytocin to 500 c.c. of 5% glucose and water. This should be started slowly and be under the constant personal observation of the attending physician.

The ligation of the left internal iliac vessels might have prevented this woman's death. Such ligation might have been very difficult, technically, owing to the marked distortion of the anatomy caused by the hematoma and edema; nevertheless, it would appear to have been the surgical procedure of choice to control the bleeding in this case.

When a catastrophe such as this occurs, all available additional specialized help should be summoned by the attending physicians. Most physicians who have been in practice for some years can remember emergencies occurring in their practice where such a request for specialized assistance may well have improved patient care and the overall results, as well as lessened the attending physician's anxiety. □

Cefracycline[®]
BUFFERED TETRACYCLINE
Frosst

**SUSPENSION
AND TABLETS**

For precautionary statement regarding
toxicity to liver and pancreas, please consult
your Vademecum International.
Full information available on request.



An Education
For Your Son

ROTHESAY COLLEGIATE SCHOOL

Founded 1877

An Old New Brunswick School for Boys

Grade VII through Senior Matriculation

A training in

SCHOLARSHIP,
LEADERSHIP,
CHARACTER

- Small classes, individual help and guidance.
- A well-planned Physical and Athletic Programme.
- A sound training in Discipline and Responsibility.

For Information Write to
the Headmaster,

C. H. BONNYCASTLE, B.A., LL.D.
ROTHESAY, New Brunswick

The true way to bank today

Combine a True Savings Account, paying an attractive interest rate, with a low cost True Chequing Account. Get more interest on savings, save on chequing, too.



Bank of Montreal
Canada's First Bank

ARCHIBALD COAL & OIL CO. LIMITED

IMPORTERS & DISTRIBUTORS

Distributors of "AERO" OIL BURNERS

OIL FURNACE UNITS serviced and installed

FURNACE and STOVE OIL automatic oil delivery

BUDGET plan — No interest or carrying charges

NOVA SCOTIA COALS and COKE

"WE SERVE THE METROPOLITAN AREA"

Phone 423-6144 Call Day or Night

947 BLAND STREET

HALIFAX, N.S.

Cephaloridine BDH

DESCRIPTION: Cephaloridine B.D.H. is a semi-synthetic antibiotic substance obtained from the parent antibiotic cephalosporin C, presented as a water soluble crystalline powder.

INDICATIONS: Infections by the following gram-positive bacteria: *Staphylococcus aureus*, *Streptococcus pyogenes*, *Streptococcus viridans*, *C. diphtheriae* and *D. pneumococcus*. An in vitro concentration of 1 µg/ml. or less inhibits most strains. An in vitro concentration of 8 µg/ml. also inhibits most strains of *E. Coli*, *Proteus mirabilis*, *Klebsiella spp.*, *H. influenzae*, *N. gonorrhoea*, *N. catarrhalis*. Infections where penicillin cannot be used, either because the organism is penicillin-resistant, the infection is likely to be mixed or the patient is penicillin sensitive.

ADMINISTRATION: Cephaloridine B.D.H. is administered parenterally either by injection or intravenous drip. Intramuscular or deep subcutaneous injection is the general route and is generally free from pain even with repeated injections. No phlebitis is reported from large doses by intravenous drip. The intravenous injection of a concentrated solution is not recommended. Peak serum levels after intramuscular injection are obtained in about 30 minutes and good levels maintained for 6 to 8 hours.

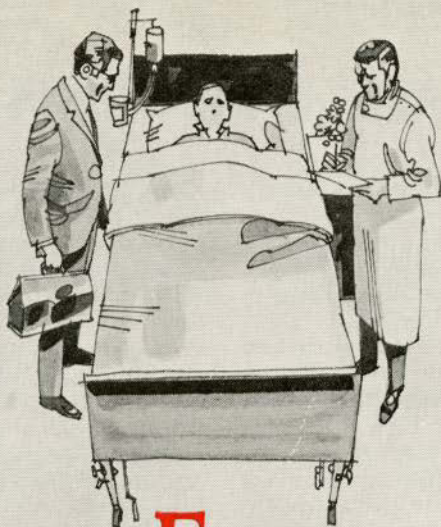
DOSAGE: A chart for the purpose of calculating dosage is included in the package. Cephaloridine dosage of 20 mg/Kg/day will kill gram-positive organisms and infections due to gram-negative organisms and mixed infections will usually respond to 40 mg/Kg/day. Higher dosages have been used and in severe infections of unknown aetiology, subacute bacterial endocarditis, septicaemia, post operative infections, osteomyelitis and peritonitis, as much as 100 mg/Kg/day have been given. As clinical experience with high dosage is limited, it is probably unwise to exceed 6 grams daily in adults, and the patient should be carefully watched for side effects.

PRECAUTIONS AND CONTRAINDICATIONS: Since human experience with Cephaloridine is limited it should not be used in women of child bearing age unless, in the judgment of the clinician it is essential to the welfare of the patient.

Renal function tests, coagulation studies, routine leucocyte and platelet counts should be made during therapy. Renal function and cephaloridine levels should be carefully watched when used in patients with renal impairment. Cephaloridine is inactive against protozoa, helminths, fungi including *Candida albicans*, *Proteus* species with the exception of *Proteus mirabilis*, *Brucella abortus* and *Ps. pyocyanea* are insensitive to cephaloridine and it has low activity against *M. tuberculosis*. Strains of *Streptococcus faecalis* and *Aerobacter aerogenes* vary in sensitivity. Generally, organisms which develop resistance to other antibiotics retain sensitivity to Cephaloridine B.D.H. so that penicillin-resistant staphylococci is usually sensitive to Cephaloridine B.D.H.

SIDE EFFECTS AND TOXICITY: Dosages of 6 Gm. of Cephaloridine B.D.H. daily may produce hyaline and granular casts in the urine less commonly accompanied by proteinuria without renal dysfunction. These are reversible with cessation of therapy. Rare reports have been received of a temporary neutropenia and agranulocytosis and of a transient rise in S.G.O.T. Skin rashes have occurred though patients hypersensitive to penicillin usually tolerate the drug well. Renal disturbances with high dosage or in patients with kidney dysfunction have occurred.

HOW SUPPLIED: Cephaloridine B.D.H. is issued in vials containing 250 mg., 500 mg., and 1 gram of Cephaloridine in boxes of 5.



For
infections
which worry you,
use
Cephaloridine BDH

Cephaloridine is the new semi-synthetic antibiotic that no hospital should be without. It could just save your patient's life.

Because Cephaloridine provides a new and highly effective weapon against a wide variety of infection. Particularly in cases where patients can not tolerate penicillin.

Cephaloridine has several advantages for use in hospitals. It quickly kills a wide range of gram-positive and gram-negative

organisms; it is intensely bactericidal against penicillin-resistant staphylococci; there is no cross allergenicity with other antibiotics; it shows no significant degree of protein binding; it can be administered safely to young and elderly patients; and there is very little pain or irritation from injection.

BDH Cephaloridine should be in every hospital pharmacy. We urge you to make sure your hospital stocks it. It could just save a life.



BDH PHARMACEUTICALS

a Glaxo Canada Ltd. Company

TORONTO, MONTREAL, VANCOUVER, WINNIPEG

MEMBER

PMAC

Maternal and Perinatal Health

The fundamental aims of the Committee on Maternal and Perinatal Health should be:

(a) to identify factors having a deleterious influence on perinatal and maternal health.

(b) formulate programs which may eliminate or reduce the deleterious factors so identified.

(c) to initiate the implementation of corrective programs.

It should be noted that the committee is responsible for maternal and perinatal health, not just mortality. Thus the committee must concern itself with the maintenance and improvement of the standard of health of pregnant mothers, as well as prevent deaths. Similarly, the committee has as its obligation a reduction in mental retardation, cerebral palsy and other similar disorders.

Traditionally, such committees obtain their background information from the detailed study of all maternal and perinatal deaths. For many years all maternal deaths have been studied in detail; however, only a small proportion of the perinatal deaths have received such detailed study. To this can be added the total number of perinatal deaths by weight group for each hospital in the province.

From this information we can make certain general conclusions.

1. Nova Scotia has undesirably high maternal and perinatal mortality rates, and that these rates show marked regional variation.

2. The committee on maternal and perinatal health will require the cooperation of every physician associated with the care of pregnant women and/or looking after the newborn; if these rates are to be lowered.

In order that every perinatal and maternal death may be studied in detail every branch medical society must form its own maternal and perinatal health com-

mittee. This committee will be made up of representatives from each hospital in the area included by the branch society. The chairman of this committee will be elected by the branch medical society and this person will also serve as the corresponding member with the central committee.

These branch committees will require the utmost in cooperation from their fellow physicians as the major requirement in performing adequate perinatal studies is the collection of complete and accurate data. This must come from office records, hospital charts, and be supplemented by a detailed autopsy examination. The autopsy examination is essential, though unfortunately is often not requested.

With adequate functioning of the branch society committees the central committee will then be free to assume its major tasks:

(a) Assist the branch society committees in the evaluation of their results and the presentation of these results.

(b) Accumulate meaningful data from all maternal and perinatal deaths in the province.

(c) Attempt to identify areas where corrective measures may be applied to reduce perinatal and maternal mortality.

(d) With the cooperation of the medical society and its members, initiate practical, effective and corrective programs.

The task of lowering Nova Scotia's perinatal and maternal mortality rates and improving health care associated with pregnant mothers and their newborn should represent a major challenge to the medical society. Cooperation certainly will be the key to success. □

D. W. C.

WANTED

General Practitioner, Pediatrician, required in a mining community in Nova Scotia. Initial contract leading to Partnership. Starting Salary \$24,000.00. Include complete curriculum vitae in reply.

Reply Box 100, *The Nova Scotia Medical Bulletin*, Sir Charles Tupper Medical Building, University Ave., Halifax, N.S.

LOCUM WANTED

Dalhousie graduate, now specializing, but with 4 years experience in G.P. is interested in obtaining a locum in Cape Breton this summer for 3 weeks. Preference given where accommodation for wife and 2 children available. Contact: Dr. G. M. Matheson, P.O. Box 904, Carleton Place, Ontario.

Halifax Infirmary

The Halifax Infirmary had its origins in the late winter of 1866 when the Sisters of Charity, teaching in the City of Halifax, were called upon to nurse cholera victims on MacNab's Island. Nineteen years later the old "Waverley House", a second-rate hostelry on the corner of Barrington and Blower Streets, was converted to a home for aged women; this soon developed into a hospital called the "Victoria Infirmary" and was later rechristened "The Halifax Infirmary". Thirty years later the need for more room led to the erection of the present Halifax Infirmary in 1933. It provided 228 beds for the care of medical, surgical, and obstetrical patients. In 1963 a new wing was opened, bringing the total bed capacity to 491 adult and children's beds, and 119 newborn bassinets. The additional space also allowed for the expansion of ancillary service such as Laboratory, X-Ray, Outpatients, Operating Room.

In 1967 expansion was once again enforced. This took the form of a modern clinical laboratory, and an Education Wing, adjoining Gerard Hall, the fourteen-story residence.

Along with the expansion of physical facilities went the expansion of services and of the educational role of the hospital. In 1962 an agreement between Dalhousie University School of Medicine and the Halifax Infirmary provided that the facilities of the Infirmary be used for undergraduate and post-graduate medical education. Numerous educational programmes have been developed through the years, and at present some nine schools, for paramedical education, are in operation. These include: Nursing, Nursing Assistants, Operating Room Technicians, Food Service Supervisors, Radiotherapy Technicians, and Dietitians. As new methods of diagnosis and treatment developed, so these have been incorporated into the services offered by the hospital. Today a broad range of paramedical services is offered to assist the physician in the care of the patient.

The present *role* of the Halifax Infirmary is seen as a non-competitive facility integrated into the University Hospital group in offering health care to the entire family.

DOCTOR REQUIRED

Family Doctor Required in Bedford, N.S.
In Association with

Dr. James Fraser and
Dr. Dennis Guest

Offices: Suite 205, Sunnyside Plaza.
Phone: 835-3361

The *objectives* are:

- i. Patient Care—a hospital providing a wide spectrum of services within the hospital and reaching out into the Community;
- ii. Education—a hospital providing a family setting for the training of future family medical and para-medical personnel;
- iii. Research—a hospital providing facilities for studies relating to the impact of family care or the Community;
- iv. Community Help—a need for a hospital providing extended out-patients and community services such as home care and social work.

Some idea of the day-to-day activity may be gained from a consideration of the following statistics for 1969:

In-patients treated	15,404
Out-patients treated	14,841
Surgical operations performed	9,336
Medical Staff on privileges . . .	265
Other Personnel	1,100
Students on course	325

In brief, the Halifax Infirmary is a community general teaching hospital providing a broad range of diagnostic and therapeutic services for the people of Nova Scotia. □

W. E. D.

Talk to
Canada's largest
trust company
about managing
Your Investments

 Royal Trust

Doctor C. K. Fuller

There are a number of "Medical" families in Nova Scotia. One such is that of Dr. C. K. Fuller, whom we salute in this issue of the *Bulletin*. A respected ophthalmologist and general practitioner, his son Dr. S. C. Fuller of Bedford, and Dr. A. W. Titus of Halifax, his son-in-law, keep the medical tradition alive.

"C. K." graduated from Toronto in 1916, and it was not until the latter part of 1969 that he decided to retire from practice. He can surely look back over some 53 years of practice with much satisfaction. For the first 15 years he was a general practitioner in Yarmouth. He then decided to study ophthalmology in Vienna and Edinburgh, and in the early thirties he returned as a Fellow of the Royal College of Surgeons of Edinburgh to conduct a busy practice covering the fields of general practice, otolaryngology, and ophthalmology. A measure of his versatility and his attention to detail is an instru-

ment made to his own design for tonsillectomy: an instrument still in use today in younger hands.

While dedicated to medicine, C. K. has evinced interest in many other fields. A raconteur of note with a good memory and a sense of humour, he has developed a variety of pursuits. Widely read, he has a fine collection of First Editions, especially in the fields of general and religious history and of biography. Equally absorbing has been his hobby of woodworking, and in his hands some excellent pieces have been created. Out of doors, C. K.'s interest and skill in trout fishing is well known.

A modest and reticent man, he celebrated his Golden Anniversary two years ago, and he now lives in retirement outside Yarmouth. We salute C. K. for his contribution to medicine in Nova Scotia, and we wish Dr. and Mrs. C. K. Fuller well in the years ahead. □

FORTHCOMING MEETINGS

First Assembly of the Canadian Rehabilitation Council for the Disabled: Fort Garry Hotel, Winnipeg, Manitoba, April 16-17, 1970. For further information write: The Canadian Rehabilitation Council for the Disabled, Suite 303, 165 Bloor Street E., Toronto 285, Ont.

Annual Training Workshop in Rehabilitation: University of Manitoba, Winnipeg, May 25 to June 12, 1970. Brochures and application forms are available from: The Extension Division, University of Manitoba, Winnipeg 19, Man.

First International Congress on Group Medicine: The Manitoba Centennial Concert Hall, Winnipeg, Manitoba, April 26-30, 1970. Details may be obtained from: Congress Secretariat, 425 St. Mary Avenue, Winnipeg 1, Man.

Canadian Medical Association, 103rd Annual Meeting, June 14-20, 1970. Information is available from C.M.A., C.M.A. House, 1867 Alta Vista Drive, Ottawa 8, Ont.

College of Family Physicians of Canada, Ontario Chapter, Annual Spring Seminar: April 11, 1970. Details from Dr. C. M. Warren, 1939 Leslie Street, Don Mills 405, Ont.

14th Annual Scientific Assembly of the College of Family Physicians of Canada. Hotel Nova Scotian, Halifax, N.S. July 20-23, 1970.

Eleventh International Congress of Internal Medicine: New Delhi, India, October 18 to November 12, 1970. For the restless, a Post-Convention Tour Around the World can be arranged for \$1935.00 only.

35th Biennial Convention and General Meeting of Canadian Nurses' Association will be held from June 14 to 19, 1970, in Fredericton, N.B. For further details of this, the theme of which is "Continuing To Cure in the '70s", write: Canadian Nurses Association, 50 The Driveway, Ottawa 4, Ont.

Canadian Society of Chemotherapy, 6th Annual Meeting, Chateau Frontenac, Quebec City, May 28-29, 1970: For information write: A. Villeneuve, M.D., Hospital St. Michel, Archange, Quebec 5, Quebec.

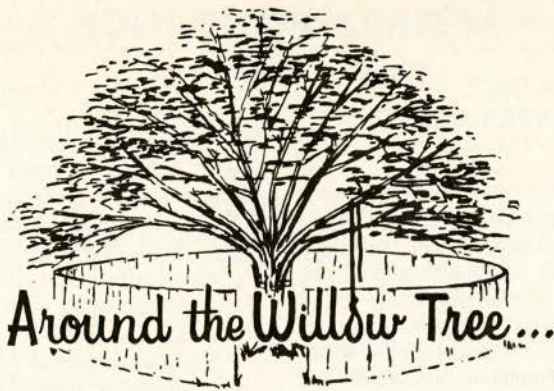
Medical Society of Nova Scotia

GOLF TOURNAMENT
Digby Pines Golf Course

Friday and Saturday June 26 and 27, 1970

Hosts: Valley Medical Society
Co-ordinator: Dr. Doug Denton

Application Forms and full details to follow.



FROM A FORMER EDITOR'S CORRESPONDENCE

"I have been racking my brains to think of a sprained ankle joke but it is quite futile because when you come down to it there is nothing can top the mental image of a 6' 4" fellow planking around on crutches—all I can think of is a praying mantis in drag . . .

I have earned my right to a chuckle at your expense because I once engaged in a duel with the starting handle of a recalcitrant automobile, thereby acquiring a sprain which invoked the fascinated involvement of two professions—medicine and engineering. The injured party was a heretofore inoffensive testicle, who had always gone about its job quietly and efficiently giving excellent service in the line of duty. The day following the incident, this benevolent gland awoke to find that it had assumed an entirely new dimension and status. It was about the size of a breadbox and weighed in the vicinity of 432 lbs.

There are some who would no doubt consider a 400 lb testicle to be rather a fun thing. However, I would not give it my whole-hearted endorsement. The banging and crashing in the vicinity of the kneecaps is a constant inconvenience, not to say downright inconsiderate of the neighbours who have to put up with the noise. It also plays hell with a smartly tailored town suit.

The medical treatment consisted of immersing the whole apparatus in a bowl of evil-smelling gunk, which the doctor cheerfully informed me contained opium. This meant that I not only had the largest testicle in the free world but also the most turned on. One gargantuan appendage, stoned out of its mind, is really no asset—unless one can locate a 15' Chinese lady with a sense of humour. I may also assure you that the physical

contortions required to implement the treatment are something else, especially when necessitating the assistance of a wife who is purple with suppressed laughter which can only be relieved by rolling on the floor shrieking with helpless merriment. Not good for the morale.

The engineering came into the picture when it became apparent that the healing process was to be lengthy and a way had to be found to allow me to go about my daily rounds. The conventional 'jock strap' proved to be ineffective, having a nasty tendency to break just as I was negotiating the stairs of a bus—causing an immense snapping explosion which tied up London Transport while they checked for blown tires. After utterly destroying at least seven of these devices, thereby sustaining severe contusions and lacerations in the vicinity of the navel caused by flying elastic plus locking of the finger joints as a consequence of grabbing for the thing before it hit the floor, we finally hit upon the solution.

Gothic puts out a reinforced brassiere which has much to commend it and I regret that I have never sent them a testimonial. The size 42, D cup, is a masterpiece of construction and utility. The band fits nicely around the waist and the straps, when sewn to a pair of fireman's suspenders, contribute the required support. The bones in the cups have a tendency to chafe the inside of the thighs but this is a small matter when compared with the uplift in spirits and everything else.

The moral of all this is very precise. When you are feeling sorry for yourself, on crutches or off, take heart. Somewhere in the jostling crowd may be a chap wearing an upside down brassiere—and damn glad of it. It sort of puts things in perspective, don't you think?" □

CORRESPONDENCE

INTERFERENCE WITH AUTOANALYZER RESULTS

To the Editor,

In view of the increasingly widespread use of automated procedures for clinical biochemistry in which Technicon AutoAnalyzers and their methods are used, the following information on interferants may be of value to your readers. It is taken from the "Summary Report", American Society of Clinical Pathologists' Commission on Continuing Education, Vol. VI, No. 63, Issue No. 87, October 1969.

Para-amino salicylic acid—elevates SGOT result.

Diabetic ketosis—elevates SGOT result.

Dextran—causes turbidity in Biuret reaction—appears as elevated total protein value (*Bulletin of the Registry of Med. Tech.*, Vol. 39, No. 2, 1969).

EDTA—inhibits alkaline phosphatase enzyme methods.

Bromides—react in chloride method, appears as increased (or falsely normal) chloride value.

Gall Bladder Dyes—increase value of SGOT and bilirubin, effect short-lived, (approximately 12 hrs.).

Albumin injection—has caused increased alkaline phosphatase value (*Am. J. of Clin. Path.*, Vol. 52, No. 4, 1969).

Bilirubin—interferes in cholesterol method causing increased value. Calculated correction of 1 mg.% bilirubin is equal to 5 mg.% cholesterol elevation.

Hemolyzed sera—naturally elevates LDH, but also uric acid (cells contain reducing substances which are not destroyed by alkaline treatment).

O. C. MacIntosh, M.D.,
Halifax, N.S.

ELECTIVE INDUCTION

To the Editor,

I was interested to read the article on "Elective Induction" by Dr. D. R. MacInnes, which appeared in the February 1970 edition of the *Bulletin*. The author is to be commended for reporting his personal experiences, since there is a wealth of interesting material available in the records of practitioners in Nova Scotia, which should be brought to the attention of physicians everywhere. However, two rather unrelated points are made in the article which I feel I must contest.

The first point is the claim that the family physician is being removed from the obstetrical scene. While an increasing amount of obstetrical care is being provided by specialists, particularly in the larger cities, the majority of deliveries in the Maritimes are conducted by family doctors, and will continue to be their responsibility for many years. To this end, the Family Practice Residency Programs emphasize obstetrics as a major component of the course. While the regulations laid down in accredited hospitals may cover many professional activities, they are formulated by the medical staff by group decision to ensure good standards of professional work. They are not intended to cut out any qualified physician. No thinking person would want to go back to the days of totally unregulated hospitals.

The second point made in the article is that elective induction of labour is the surest way to provide a labouring woman with personalised medical care. This may be true, but at what price to the mother and infant?

In any obstetrical situation, the clinician must weight the advantages and disadvantages of the available courses of action and select that which appears, on good evidence, to be the best.

I agree with the author that if elective induction is contemplated, that excellent prenatal care and careful assessment are essential. Several other points should, however, be stressed:

The uterus should not have an operative scar.

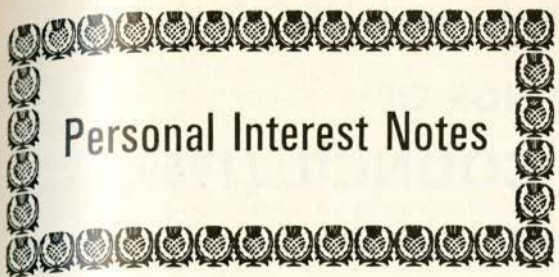
A trained attendant must be present at all times during the induction.

There should not be grandmultiparity or multiple pregnancy.

Despite these precautions, and despite the author's commendable record of 363 labours without complication, it should be recognized that induction of labour may lead to many real problems, of which I would like to stress two. Uterine overstimulation with pitocin can lead to fetal hypoxia or uterine rupture, and can only be avoided by very careful titration of the dose of oxytocin against the uterine response, using dilute solutions. Prematurity is the second great hazard of elective induction. Despite our best efforts we cannot always accurately assess fetal maturity and elective induction of labour inevitably leads to an increased incidence of prematurity.

S. C. Robinson, M.D.
Halifax, N.S.

[The article on "Rupture of the Uterus", reprinted from the *Canadian Medical Association Journal*, on page 48 of this *Bulletin*, gives an example of the injudicious use of Pitocin.—Ed.]



Personal Interest Notes

Dr. Ian Ross recently returned to South Korea after spending a sabbatical in Halifax. Dr. Ross practices anaesthesia in Seoul.

Among hospital news items we note that Blanchard Fraser Memorial Hospital in Kentville, which has now reached a bed-capacity of 138, also has a remarkably heavy out-patient load of 11,855 visits. As in all hospitals, the work load is steadily increasing. Which brings to mind two other items: first, that a recent study indicated that some surgical and medical patients can be treated at home as safely and more economically than in hospital, and second, that a report from U.S.A. suggests that a proportion of surgery now performed is unnecessary. As an aside, in these days of rapid change and rocketing costs, isn't it time that we in Nova Scotia seriously studied the possibilities for change in our concepts of the environmental aspects of medical care?

Dr. Helen Holden, of Kentville, was appointed medical director of Nova Scotia Sanatorium. Dr. J. J. Quinlan, her husband, is also active in the field of tuberculosis.

A recent arrival in New Glasgow is Dr. T. S. MacDonald, from Prince Albert. Dr. MacDonald is in the practice of Obstetrics and Gynaecology.

Dr. Ritchie Douglas, also of New Glasgow, has recently been enjoying his annual holiday in Florida. Other visitors to warmer climes have included Drs. Brian O'Brian, Dr. D. A. Gillis, Dr. W. A. Ernst, Dr. W. C. Nicholas, all of Halifax.

Dr. T. M. Roberts has recently been on a working visit to the Dominican Republic. Under the auspices of the Department of External Affairs, Dr. Roberts has been doing plastic surgery.

Recent arrivals in Halifax include Dr. P. C. Bagnall, formerly of New Glasgow, who recently started a residency at the Izaak Walton Killam Hospital for Children in Halifax.

How sweet it is . . . In one Halifax hospital recently, an anaesthetist marvelled at a delightful grouping: in one operating room were gathered Drs. Lovely and Precious and — Miss Sweet.

We congratulate Dr. R. C. Dickson, Professor of Medicine, Dalhousie University, on his election to the Presidency of the Royal College of Physicians and Surgeons of Canada. We also congratulate Dr. C. J. W. Beckwith, of Halifax, on his recent election to Senior Membership of Halifax Medical Society.

Dr. R. B. Goldbloom, Professor of Paediatrics, Dalhousie University, was recently appointed to the Committee on Nutrition of the American Academy of Pediatrics.

Dr. Barry Wheeler, of Truro, during the last few months has been visiting the Department of Anaesthesia at the Izaak Walton Killam Hospital for Children, Halifax.

Dr. C. A. Robertson and Dr. J. C. Wickwire, both of Bridgewater, attended a course in Clinical Cardiology at the Royal Victoria Hospital, Montreal, during February.

An allied topic, the shortage of nurses, was recently discussed by Halifax Medical Society. Rather than an absolute shortage, there appears to be inefficiency of utilization. This is a problem which again fits in with the need for a review of medical care.

OBITUARY

Dr. Adrian MacKenzie, director of clinical laboratories at the Institute of Pathology, Halifax, died in Victoria General Hospital March 5th, at the age of 46. Dr. MacKenzie was born in Stellarton, served overseas with the Canadian Army in the Second World War, upon his return graduated in Medicine from Dalhousie in 1954. Our deepest sympathy is extended to the family.

Our sympathy is extended to Dr. D. A. MacDougall, of Antigonish, on the recent loss of his wife Theresa; to Dr. G. H. Wheelock, of Armdale, on the loss of his wife Elizabeth; to Dr. B. Skinner, of New Glasgow, on the recent loss of his sister; to Dr. and Mrs. A. G. Brown on the loss of their infant son; and to Dr. C. J. W. Beckwith on the recent loss of his brother.

CONTRIBUTIONS, PLEASE!

The Personal Interest Notes page is interesting to many readers. However, to make it representative it is essential to have as many contributions as possible sent in either from Branch Societies or from individuals. Any help will be gratefully appreciated. □

PROCEEDINGS OF
5th MEETING OF COUNCIL (1969)
AND
116th ANNUAL MEETING

The first session of the 5th Meeting of Council was called to order by the President and Chairman of the Meeting, Dr. F. A. Dunsworth, on Monday, November 17, 1969 at 9:30 a.m. The Chairman of the Archives Committee, Dr. C. J. W. Beckwith, read the names of Society members deceased between November 22, 1968 and November 1, 1969 as follows: Drs. F. H. Bachman, J. E. Hiltz, H. E. Kelly, D. MacMillan, S. C. Sarkar, C. B. Smith, and J. A. Young. The Chairman requested two minutes silence in tribute to the memory of these members.

New membership applications totalling 103 were approved by Council.

The Transactions of the 4th Meeting of Council and 115th Annual Meeting (1968) as printed in the April issue of *The Nova Scotia Medical Bulletin* were adopted. The Transactions of the Special Council and Special Society Meeting held in March, 1969 and as circulated in President's Newsletter No. 9 were also adopted.

The Executive Committee Report—Dr. C. E. Kinley's report reviewed the activities of the Executive Committee since the last Annual Meeting, the details of which have been reported to members at their Branch Meetings throughout the year. Of particular interest were the following:

- (a) Successful efforts by the Society in bringing about more satisfactory remuneration levels for Residents-in-Training.
- (b) Introduction of Professional Public Relations Services and their value to the Society.
- (c) Revision of the Medical Act in conjunction with the Provincial Medical Board.
- (d) Establishment of the Committee for Anaesthesia Standards.
- (e) Approval of a plan to provide financial assistance to Medical students.
- (f) Establishment of a Liaison Committee to deal with the Nova Scotia Hospital Insurance Commission.
- (g) Bringing about the formation of the Voluntary Health Council of the Province of Nova Scotia.

On the matter of Public Relations services, Dr. Kinley reported that the Executive Committee had discussed this matter at great length, and in endorsing the

present contractual arrangements with the consultants, reaffirmed its complete satisfaction with these arrangements and strongly recommended their continuation.

Medical Care Committee—Dr. F. A. Dunsworth, Chairman. This Committee which over the year had become known as the Action Committee, was renamed by the Executive as the President's Liaison Committee, as this was considered to describe better the activities and functions of this Committee.

Dr. Dunsworth's report was a detailed review of the activities of this Committee in dealing with such very important subjects as Maritime Medical Care Inc. coverage of optometric services, remuneration of Physicians in teaching units, Tariff and Fee Schedule Development, Venereal Disease Control, discussions with the Nova Scotia Federation of Labour, development of a Patterns of Practice Advisory Committee, and negotiations with the Medical Care Insurance Commission on a variety of other matters.

This report was adopted by Council which passed a motion of a vote of thanks to the members of this Committee for the long and difficult hours they had put in in caring for the affairs of the Medical Society.

Public Relations Report—This most comprehensive report of Dr. D. B. O'Brien's Committee, in which the activities of the Committee and the Consultants were described in considerable detail, probably provided many members of Council their first real insight into the complex nature of Public Relations in this day and age. The report described the activities of this Committee and the Consultants in bringing the Society from its somewhat shaky and vulnerable public position in early 1969 to its present-day position of recognition as a responsible and respected organization.

The report of this Committee was approved by Council.

Editorial Committee Report—Dr. I. E. Purkis reported a successful year with the *Bulletin* having published six high-quality issues and having ended the year with a surplus on its 1969 budget. He reported that investigations were continuing on the matter of develop-

ing an Atlantic Provinces Bulletin, but the results of a recent meeting of the Presidents and Secretaries of the Atlantic Provinces Branches did not lead him to believe that such a publication could be expected to evolve in the very near future.

Dr. Purkis' recommendation that the editor's honorarium be increased to \$1,000 per year was deferred for one year with the remuneration remaining at \$100 per annum.

Joint Committee of the Medical Society and Provincial Medical Board—Dr. D. R. S. Howell's Report noted that the major activity of this Committee in the past year dealt largely with the revision of the Medical Act of the Province of Nova Scotia. In noting that it appeared unlikely that future meetings of this Joint Committee would be required, he felt that since there was a possibility that regulations to the Act might have to be considered jointly the Committee should remain in existence for a further twelve months. This report was adopted by Council.

Committee on Maternal and Perinatal Health—Dr. D. F. Smith's Report of the Committee on Maternal and Perinatal Health brought forth lengthy, interested discussion. Of particular interest was the recommendation that "each area have a specified high risk hospital to which to refer its high risk obstetrical patients, and its ill and high risk neonatal patients" and associated with this was the proposal that immediate governmental support be obtained to facilitate transport of the high risk patients. These recommendations were accepted by Council and the transportation problem was referred back to the committee for more precise proposals with respect to how this could be achieved. In addition, it was recommended that each hospital have a list of high risk obstetrical and neonatal categories listed in the obstetrical and neonatal areas for all physicians to see, and that facilities in designated high risk referral hospitals be upgraded to care for the anticipated needs, with personnel training, equipment, laboratory facilities, and organization into physician-nurse teams for the care of the high risk patients referred. In addition, it was proposed that investigative teams be sent out to survey and make recommendations in the high risk regions. Council gave firm support to these recommendations. In concluding discussion of Dr. Smith's report, Council moved a vote of thanks to Dr. Don Smith for the tremendous effort he had put forth over the years in carrying out the work of this committee and requested that he be complimented on the consistent excellence of his reports to Council.

Maritime Medical Care Inc. President's Report—Dr. J. McD. Corston's Report to Council reviewed the activities of the Corporation over the past year and described in detail the considerable re-organization necessitated by the introduction of MSI and the role of M.M.C. under the changing circumstances. In describ-

ing the changing role of the Corporation in its private side operations, Dr. Corston's Report noted in detail the important functions that the Corporation will still perform for the Medical Profession and which appeared to make a clear case for the Medical Society continuing its involvement in the affairs of M.M.C.

Membership Committee Report—Dr. N. G. Glen's Report expressed concern about the number of doctors who are annually removed from the membership list because of failure to pay their membership dues. In addition, his Committee was concerned about the large number of physicians (approximately 200) who are practicing medicine in Nova Scotia but are not Society members. His report noted that 1967 Council had considered compulsory membership in the Medical Society, but to this date nothing had been done on this matter. It was his Committee's belief that this matter should be given further attention.

By-Laws Committee Report—The proposed amendments to the Society's by-laws as listed in the Notice of Motion in the October Issue of the Medical Society *Bulletin* were approved with three minor exceptions, two of which concerned provision of alternate representation on Council and the third, re-phrasing of object number Seven to read as follows "that no physician be denied membership in the Society on the basis of race, religion, or place of origin".

This Committee had considered a proposal from the Section for Salaried Physicians to have a special Associate Status which would not require membership in the Medical Society of Nova Scotia. The By-Laws Committee recommended against this and this recommendation was approved by Council.

Finance Committee Report—Dr. J. A. Myrden's Report to Council included financial statements for the operation of the Medical Society for fiscal 1969, and included a budget for the operation of the Society from October 1, 1969 to Sept. 30, 1970 (fiscal 1970). Council reviewed the increased expenditures which had been examined in detail by the Executive Committee at previous meetings and in approving the Report, authorized increases in various categories of membership dues to provide funds for continued operation of the Society.

Dr. Myrden's budget included provision of funds for a plan to provide financial aid to Medical Students. The concept of this plan, approved earlier in principle, was one whereby the Medical Society will guarantee Bank of Montreal Loans to up to 35 medical students until such time each student graduates, at which time it will be his responsibility to make other satisfactory financial arrangements with the Bank of Montreal for either payment of the loan or continuation on altered terms. During the period the loan to the medical student is in force, the Medical Society will pay the interest on the loan at a rate of $\frac{1}{2}$ of 1% above prime

rate. Upon graduation the student will assume responsibility for the loan, and the Society will discontinue payment of the interest. Medical students qualified to participate in this plan will be required to assign life insurance in a sufficient amount to cover the loan at all times. The eligibility of a student applying for this assistance will be determined jointly by the Office of the Dean of Medicine and the Medical Society.

Committee on Anaesthesia Standards—Dr. D. A. E. Shephard's Report dealt in detail with the importance of continuing efforts to improve the Standards of Anaesthesia. His report described the difficulties experienced in this area, and made recommendations which were approved by Council as to the nature of studies which should be undertaken by the Medical Society in conjunction with the Section for Anaesthesia and the Division of Continuing Medical Education.

Committee On Legislation and Ethics—Dr. D. R. S. Howell's Report on the activities of this Committee over the past year included reference to its involvement in supporting the revised Medical Act at the public hearing of the Law Amendments Committee of the Legislature before final reading of the amended act. It was noted that the Chiropractors again sought professional status and, although denied on this occasion, it was considered entirely likely that further attempts would be made in the future. The matter of reporting therapeutic abortions was also being considered by this Committee.

Dr. Howell's report included a statement by the Canadian Medical Protective Association on the subject of Voluntary Sexual Sterilization. This position paper was considered an excellent document and Council agreed that measures should be taken to insure its availability to all members of the Medical Society. Dr. Howell's report drew attention to the point that the Terms of Reference of the Committee on Legislation and Ethics required clarification and recommended that the Executive Committee, or a Committee assigned by it, undertake re-definition of these Terms of Reference.

Medical Education Committee Report

The report of the Committee on Medical Education contained some interesting recommendations which were discussed at length by Council. On the premise that the responsibility for patient care should be with the hospital medical staffs throughout the Province, it was recommended and endorsed by Council that a committee on quality care be established in each hospital in Nova Scotia. In addition, Council approved additional recommendations related to the evaluation of quality care and procedures that might be required to rectify defects that may arise. The details of this report are being sent to all Branches for consideration with respect to implementation of these recommendations.

Included in the Medical Education report was a recommendation that the Society concern itself with

the problem of tax relief for those involved in furthering their medical education. Arising out of this proposal was a resolution which formed an Ad Hoc Committee to prepare a Brief to the Federal Department of Finance concerning the White Paper on Taxation.

The final recommendation of the Medical Education Committee, to the effect that the Medical Society of Nova Scotia continue to support the Department of Continuing Medical Education of Dalhousie University, was approved. This resolution was to be passed to the Finance Committee for consideration during preparation of the 1971 budget.

Report of Representative to CMA Council on Community Health Care

Dr. Peter Gordon, Nova Scotia representative to the C.M.A. Council on Community Health Care, introduced the subject of Therapeutic Abortions and possible requirements for reporting same to the Minister of Health in Nova Scotia. Council was unanimous in its opinion that automatic submission of details of all cases of Therapeutic Abortion would be a violation of the rights and privacy of the patients concerned. It was noted that on receipt of the Minister of Public Health's first proposal with respect to regulations concerning reporting of Therapeutic Abortions, the Society had officially presented its objections to these regulations and requested an opportunity to discuss the details with Mr. Donahoe.

Continuing with this report, the subject of Non-Medical Use of Drugs was discussed at length. Arising out of this was a proposal that an Ad Hoc Committee be formed, the purpose of which was to bring about the formation of a Task Force whose assignment would be the preparation of a Brief on this subject to the Federal Government's Commission of Inquiry. Recognizing the problem as a social problem more than a strictly medical problem, direction to the committee was to ensure that the Task Force represent all interested authorities and organizations.

The subject of Pollution was discussed at this point and Council members from throughout the Province expressed their concern. Arising out of the discussion was a strong feeling of determination by Council that the Medical Society should take an active part to bring about correction of the existing problems and prevention of further problems in this regard. It was noted that there was no report to Council from the Committee on Public Health, and it was suggested that this Committee should be re-activated, strengthened, and directed to assume responsibility for action on this issue. It was considered important that the Society should not appear to be jumping on the bandwagon, so to speak, but should assume an active and effective role in the anti-pollution area.

Fees Committee Report

Dr. J. H. Charman advised Council that it had been decided by the Executive Committee that a new Fee

Schedule would not be issued until September of 1970. He expected that a great mass of computer data would be available to the Committee in early 1970 to aid the Society in preparing an appropriate Fee Schedule. He advised Council that the Society members of the Tariff Development Committee had been assisting the M.C.I.C. in developing computer programs to provide the information that was necessary for the Society. Dr. Charman requested the co-operation of Section Chairmen in submitting their proposals for Fee Schedule Amendments at the earliest possible date, preferably prior to the first of February.

Ad Hoc Committee on Delivery of Medical Services

Dr. R. O. Jones, in making his report to Council, stated that the original purpose of this Committee was to have exploratory discussions concerning the problems of health care in this Province, and to investigate the desirability of forming an inter-disciplinary council which should concern itself with the overall problem of improving the Health Services Delivery System in Nova Scotia. Discussions with authorities throughout Canada had indicated a growing need for this form of council in Canadian Provinces, as well as provision for an overall planning council in Ottawa. Following a number of preliminary meetings, Dr. Jones reported that on October 7, 1969 a very well attended meeting of representatives from the Allied Health Professions, the Voluntary Agencies, and the Consumers of Health Services took place in Halifax. At this meeting the decision was made to proceed with formation of a Health Planning Council, and officers were elected to assume responsibility for co-ordinating the activities of the various representatives. Mr. Andrew Crook was named President, Mr. J. K. Bell, Vice-President. Dr. R. O. Jones' appointment as a representative of The Medical Society of Nova Scotia was approved by Council.

Archives Committee Report

Dr. C. J. W. Beckwith, in speaking of his report, noted that meetings had been held by representatives of the Medical Society, Dalhousie Medical Alumni Association, Dalhousie Medical School, and Kellogg Health Sciences Library. He noted that within each of these organizations there was a high common interest in development of Archives. Common objectives included collection of artifacts to create a museum, memorabilia, and other published material clippings, records of activities, etc. Dr. Beckwith requested, and was given by Council, endorsement of the Medical Society's interest in the development of Archives, along with the other organizations just mentioned. Council extended a vote of thanks to Dr. Beckwith for the tremendous work he had done during this past summer in setting up the Archives organization.

Unfortunately, time was once again the enemy of Council and precluded detailed study of each and every report submitted to Council. Dr. Dunsworth ad-

vised Council that the Executive Committee and the Officers had examined all the reports in detail and was impressed with the extent and quality of the interest and endeavour of the members of the Society in carrying out their committee work. Dr. Dunsworth noted that re-organization of the Canadian Medical Association into the five-council set-up would present difficulties in the forthcoming year in terms of maintaining links of communication between the division and C.M.A. Councils. He stated that a Committee will be active in studying requirements for re-organization in the Nova Scotia Division, and he expected that the Executive would recommend to the next meeting of Council whether or not Nova Scotia should re-organize along the lines of the C.M.A. In the interim period, Dr. Dunsworth said that Committee Chairmen would be expected to cooperate with Nova Scotia Representatives to C.M.A. Councils to ensure that Nova Scotia's positions on various matters discussed at Councils would be adequately represented. He added that the Nova Scotia Representatives to Councils had assumed extremely heavy workloads and would need all the assistance that could be made available to them.

All business of the 1st, 2nd, and 3rd Sessions of Council were ratified by the 1st and 2nd Sessions of the Annual Meeting.

Dr. F. A. Dunsworth presented the report of the Nominating Committee to the Annual Meeting. Nominations as follows were approved by the Society:

President—Dr. L. C. Steeves; President-Elect—Dr. J. F. L. Woodbury; Immediate Past-President—Dr. F. A. Dunsworth; Chairman of the Executive—Dr. C. E. Kinley; Vice-Chairman of the Executive—Dr. P. B. Jardine; Honorary Treasurer—Dr. J. A. Myrden; Honorary Secretary—Dr. W. C. Nicholas.

Branch Representatives

Antigonish-Guysborough—Dr. G. L. Silver; Cape Breton—Dr. P. S. Gardner, and Dr. J. A. McPhail; Colchester-East Hants—Dr. H. D. Lavers; Cumberland—Dr. J. A. Y. McCully; Dartmouth—Dr. J. A. Smith; Eastern Shore—Dr. S. W. Potter; Halifax—Dr. D. R. S. Howell, Dr. W. E. Pollett, and Dr. B. J. Steele; Inverness-Victoria—Dr. C. S. Chow; Lunenburg-Queens—Dr. D. A. Campbell; Pictou County—Dr. J. F. Hamm; Shelburne—Dr. F. Markus; Valley—Dr. D. J. G. Morris; Western—Dr. F. S. Ozvegy.

Branch Representatives to the Nominating Committee

Antigonish-Guysborough—Dr. H. J. Bland; Cape Breton—Dr. H. J. Devereux; Colchester-East Hants—Dr. T. C. C. Sodero; Cumberland—Dr. J. P. Donachie; Dartmouth—Dr. R. Cameron; Eastern Shore—Dr. M. P. Trivedi; Halifax—Dr. B. J. Steele; Inverness-Victoria—Dr. J. C. Aucoin; Lunenburg-Queens—Dr. W. Bennett; Pictou—Dr. R. G. Monroe; Shelburne—Dr. W. H. Jeffrey; Valley—Dr. A. A. Giffin; Western—Dr. F. S. Ozvegy.

Committee on Committees Report

Dr. C. E. Kinley advised Council that due to a shortage of time this Committee had not been able to complete its work at the two breakfast meetings scheduled for this purpose. His proposal that this matter be referred to the Executive Committee was approved by the Society.

New Business

During the final session of the Annual Meeting the subject of Compulsory Membership in the Medical Society was introduced. It was noted that in 1967 a motion approving Compulsory Membership in the Society had been approved, but to date nothing had come of it. The point was made that it was not necessarily desirable that all doctors in Nova Scotia be members of the Medical Society; on the other hand, it was generally agreed that all doctors have an obligation to contribute to the cost of operating the Medical Society, especially since they are also benefiting by virtue of the existence of the Society. This discussion resulted in the following motion tabled by Dr. G. McK. Saunders "that investigations be started and discussions initiated with the Provincial Medical Board, the Minister of Health, and/or the Attorney General to consider making provision for the Annual Licensing Fee to include the Medical Society dues as set by the Medical Society of Nova Scotia, and that this component be returned to the Society." This motion carried 54 for and 8 against.

Dr. D. R. S. Howell brought to the attention of the Society that as a result of recent publicity relating to banning of cyclamate, two patients had discontinued

use of their anti-diabetic treatment. As a consequence their diabetes had gone out of control. Dr. Howell considered it urgent that action be taken to offset the confusion of cyclamate with oral-antidiabetic agents by acquainting physicians and patients with the difference. The matter was referred to the Pharmacy Committee for action.

Dr. C. L. Gosse reported to the members that the interest in the new Lancet Fund exceeded by a considerable measure the original forecast; he also added that the Nova Scotia doctors have the record of purchasing the greatest amount, in this new fund, of any division in Canada. Dr. Gosse pointed out that the Lancet Fund had not been set up to replace C.M.A.R.S.P. but that it was more in the way of a speculator's fund, and should be regarded as such.

The next meeting of Council was set for November 27, and 28, 1970 at the Lord Nelson Hotel.

In bringing the meeting to a close, the Chairman thanked Council Members and Committee Members for all their good work over the past year. He expressed his pleasure at the good attendance at Council, noting that on Monday 65 members were present, and on Tuesday 78 were in attendance. In his view, this represented a comparatively high percentage of attendance at Council and appeared to indicate an increasing interest in Society affairs. He was hopeful this trend would continue. In moving adjournment, Dr. C. L. Gosse commended the President for his work in the past year in taking the Society through a very difficult and trying period, and that the Society was proud of him and his record of performance. A hearty vote of thanks was passed unanimously by the Society. □

NEW MEMBERS

The Physicians listed below have joined The Medical Society of Nova Scotia between September 1, 1969 and January 31, 1970. A most cordial welcome is extended from the Society.

Dr. V. P. Audain	Halifax, N.S.	Dr. C. A. Malay	Halifax, N.S.
Dr. B. D. Byrne	Halifax, N.S.	Dr. P. H. Markesteyn	Halifax, N.S.
Dr. M. S. Chandra Sekaran	Halifax, N.S.	Dr. G. Mirchandani	Halifax, N.S.
Dr. W. B. L. Downing	Sydney, N.S.	Dr. A. S. Macdonald	Halifax, N.S.
Dr. K. W. Fairhurst	Halifax, N.S.	Dr. C. W. MacNeil	Yarmouth, N.S.
Dr. P. J. Ferguson	Dartmouth, N.S.	Dr. R. S. Parmar	Halifax, N.S.
Dr. B. D. Grover	Halifax, N.S.	Dr. M. L. Paruthikal	Middle Musquodoboit, Halifax Co., N.S.
Dr. J. S. Gupta	Sydney, N.S.	Dr. V. R. Rao	Brookfield, Col. Co., N.S.
Dr. A. F. James	Truro, N.S.	Dr. R. M. Read	Halifax, N.S.
Dr. E. K. James	Truro, N.S.	Dr. W. B. C. Robertson	Halifax, N.S.
Dr. D. K. Jana	Head of Chezzetcook, Halifax Co., N.S.	Dr. S. H. Rubin	Halifax, N.S.
Dr. J. C. Johnson	Halifax, N.S.	Dr. J. M. Wallace	Sydney, N.S.
Dr. Peter Kerr	Amherst, N.S.	Dr. J. M. Wellman	Halifax, N.S.
Dr. H. S. G. Khalsa	Glace Bay, N.S.	Dr. E. G. Whitman	Westville, N.S.
Dr. D. M. Kooka	Glace Bay, N.S.		
Dr. B. R. S. Mainwaring	Canso, N.S.		



What's new in Infant Formulas!

Now there's a new infant formula. Farmer's Wife Formula 4 . . . from Cow & Gate, the specialists in infant nutrition.

New Formula 4 is complete. There's no need to add vitamins or sugar. So it's an excellent supplement to mother's milk. It comes in cartons of 12 — 1 lb. cans, with carrying handle. Which makes it easy to carry and economical to buy. Also there's a date stamp on every can. To insure quality and freshness.

Formula 4 is also available in prepared, ready-to-feed form. So that's what's new in infant formulas. Farmer's Wife Formula 4. From Cow & Gate, who've been helping mothers feed babies for over 50 years.

New





7,000,000,000+

More Donnatal® is prescribed by physicians than any other antispasmodic.

After more than a quarter of a century and over seven billion doses, Donnatal is still prescribed by more physicians than any other antispasmodic. Consider the effectiveness, dependability, and safety that must characterize a medication for it to achieve such long-lasting and wide-spread acceptance. Seven billion doses! If Hippocrates could have started prescribing Donnatal in 430 B.C., he would have to have given it to over 2,670 patients t.i.d. for them to have taken over seven billion doses by 1966!

For full prescribing information, consult product literature, or Vademecum International.

In each Tablet, Capsule or 5 cc. Elixir

0.1037 mg.	hyoscyamine sulfate.....	0.3111 mg.
0.0194 mg.	atropine sulfate.....	0.0582 mg.
0.0065 mg.	hyoscine hydrobromide.....	0.0195 mg.
16.2 mg. (¼ gr.)	phenobarbital	(¾ gr.) 48.6 mg.

In each Extentab®



A. H. Robins Company of Canada, Ltd., Montreal, Quebec **A·H·ROBINS**

COPY CLIPPERS

LUNATIC FLU

Turkish peasants say the flu sweeping Europe and the Middle East is lunar flu, brought from the moon by the U.S. astronauts.

"Never in our lives have we seen such an illness," said one woman in a village near Kayseri, in central Turkey. "If it did not come from the moon, it would have appeared before."

"They think they did a good thing, do they?" she said of the astronauts. "Well, my husband is in bed, my daughter-in-law is so sick she can't milk the cow, my grandson is on his deathbed, my son can't leave the house and I can hardly stand up."

The health ministry says about 4,000,000 Turks have been stricken.

Visitor: "I do hope you keep your cows in a pasture."

Milkman: "Yes, Madam, of course we keep them in a pasture."

Visitor: "I'm glad to hear that. I have been told that pasteurized milk is much the safest."

Actuary: A person who passes as an expert on the basis of his prolific ability to produce an infinite variety of incomprehensible figures calculated with microscopic precision from the vaguest of assumptions based on debatable evidence from inconclusive data derived by persons of doubtful reliability, for the sole purpose of confusing the already hopelessly befuddled group of persons who never read statistics anyway.

Golf Course: Something that more people should take and fewer should play on.

Economist: A man who would marry Elizabeth Taylor for her money.

1st Doctor: "I see you got that nice young blonde into a private room."

2nd Doctor: "Yes, she was too cute for wards."

Delusions of grandeur:

Attendant to inmate: "What makes you think you're Napoleon?"

Inmate: "God told me."

Neighbouring inmate: indignantly, "I did not."

CHILD SAFETY WEEK

The Canada Safety Council is sponsoring Child Safety Week, May 3-9, 1970. This is certainly worthy of our support, and the assistance of members in driving home to the public the urgent need to eliminate potential hazards threatening the lives and limbs of our children is requested. Statistics, usually dry, take on a degree of poignancy and it may be helpful to remember that:

In Canada each year, some 2,000 children under the age of 15 die from accidents, while over half a million are injured.

More Canadian children are killed in accidents than die from the major diseases; the biggest single killer is traffic, and in 1968, 826 children under 15 died in traffic.

Home accidents form the second big group of killers; in 1968, 598 children died in home accidents, suffocation, fire, and explosion being the main causes.

339 also died from drowning in 1968.

Accidental poisoning killed 24 children under 15; a Canadian child is accidentally poisoned once every 15 minutes.

More children die from accidents than from the next 3 causes of child deaths put together: congenital malformations, pneumonia, and cancer. Canada, in fact, heads the developed countries in the accident rate for children under one year, and also in the 5-9 age group, according to the W.H.O.

HOME SWEET HOME

"The most dangerous place in America today is the home," according to the National Easter Seal Society. 4.3 million Americans were disabled in 1968 from domestic accidents.

About 1,100 people each year are electrocuted in the U.S., more than one-quarter of them in their homes and an equal proportion by 110-volt shocks at work. This in fact is less than 2% of the number of fatalities from auto accidents . . . a remarkable result when we consider that a 25-watt bulb consumes much more than a lethal level of electricity . . .

Simple technical devices are available which can prevent many electric deaths. A recently developed one is the Ground Fault Interruptor, which can trip a circuit breaker to shut off main power in the event of small currents flowing someplace, in time to prevent serious injury, fire, or other hazard.

\$3.50 WORTH

Raw materials in the human body are worth \$3.50, says a French medical publication. It lists the body's salable substances as oxygen, hydrogen, nitrogen and minute traces of gold and silver.

R.C.P. & S. EXAMINATION RESULTS, 1969

Fellowship

Chan, Wing-Leung, Halifax, N.S.	<i>Internal Medicine</i>
Douglas, George David, Armdale, N.S.	<i>Internal Medicine</i>
Murray, Thomas John, Halifax, N.S.	<i>Neurology</i>
Rastogi, Ashok Kumar, Halifax, N.S.	<i>Neurology</i>
Hobeika, Chaker, Halifax, N.S.	<i>Paediatrics</i>
David, Charles Jacob, Dartmouth, N.S.	<i>Psychiatry</i>
Burns, Gerald Ross, Halifax, N.S.	<i>General Surgery</i>
Chan, Chung-Chun, Halifax, N.S.	<i>General Surgery</i>
Schaefer, John Paul, Halifax, N.S.	<i>General Surgery</i>
Langille, Roland Arthur, Halifax, N.S.	<i>Neurosurgery</i>
Dyack, Colin, Bedford, N.S.	<i>Obstetrics and Gynaecology</i>
Saxon, Roland David, Antigonish, N.S.	<i>Obstetrics and Gynaecology</i>
Novotny, George Milos, Halifax, N.S.	<i>Otolaryngology</i>
Wellman, John Michael, Halifax, N.S.	<i>Plastic Surgery</i>

Certification

Hryciuk, Nestor, Halifax, N.S.	<i>Anaesthesia</i>
Johnson, David William McNair, Dartmouth, N.S.	<i>Anaesthesia</i>
Townsend, Clarence Henry, Dartmouth, N.S.	<i>Anaesthesia</i>
Pinto, Zita Maria, Halifax, N.S.	<i>General Pathology</i>
Raffel, Lilamani, Bridgewater, N.S.	<i>General Pathology</i>
Ahmad, Siraj, Halifax, N.S.	<i>Internal Medicine</i>
Chan, Wing-Leung, Halifax, N.S.	<i>Internal Medicine</i>

Douglas, George David, Armdale, N.S.	<i>Internal Medicine</i>
Jana, Dilip Kumar, Halifax Co., N.S.	<i>Internal Medicine</i>
Reid, Earle Leroy, Halifax, N.S.	<i>Internal Medicine</i>
Brown, Charles Arthur, Halifax, N.S.	<i>Paediatrics</i>
Gursahani, Lachman, Glace Bay, N.S.	<i>Paediatrics</i>
Hobeika, Chaker, Halifax, N.S.	<i>Paediatrics</i>
Rathi, Laxmikant, Dartmouth, N.S.	<i>Paediatrics</i>
Wong, Kan Shick, Halifax, N.S.	<i>Paediatrics</i>
Akhtar, Syed Naveed, Dartmouth, N.S.	<i>Psychiatry</i>
Bergin, Michael Brendan, Dartmouth, N.S.	<i>Psychiatry</i>
Cunningham, Helen Marie, Dartmouth, N.S.	<i>Psychiatry</i>
David, Charles Jacob, Dartmouth, N.S.	<i>Psychiatry</i>
George, Puthenkalathil Punnose, Kentville, N.S.	<i>Psychiatry</i>
Kushner, Archibald Wilkie, Halifax, N.S.	<i>Psychiatry</i>
MacDonald, Mary Joyce, Halifax, N.S.	<i>Psychiatry</i>
Steele, John Bordon, Halifax, N.S.	<i>Psychiatry</i>
Kuder, Gerald Ralph, Halifax, N.S.	<i>Diagnostic Radiology</i>
Youssef, Nazih Rizk, Halifax, N.S.	<i>Therapeutic Radiology</i>
Schaefer, John Paul, Halifax, N.S.	<i>General Surgery</i>
Trivedi, Mrigendra, Halifax, N.S.	<i>General Surgery</i>
Dyack, Colin, Bedford, N.S.	<i>Obstetrics and Gynaecology</i>
Saxon, Roland David, Antigonish, N.S.	<i>Obstetrics and Gynaecology</i>
Chandrasekaran, Monkompu S., Halifax, N.S.	<i>Otolaryngology</i>
Wellman, John Michael, Halifax, N.S.	<i>Plastic Surgery</i>
James, Adolf Frederick, Truro, N.S.	<i>Urology</i>

ADVERTISERS' INDEX

Archibald Coal and Oil Ltd.	50
Bank of Montreal	50
British Drug Houses (Canada) Ltd.	50, 51
Cameo Restaurant	40
Connaught Medical Research Laboratories	I.B.C.
Cow and Gate	iii
Eastern Canada Savings and Loan Company	47
Frosst, Charles E. and Company	35, 49
Geigy (Canada) Limited	O.B.C.
Lord Nelson Hotel	45
Mutual of Omaha	36
North American Life Assurance Co.	43
Ortho Pharmaceutical (Canada) Ltd.	ii, 35
Renault of Canada	i
Robins, A. H. and Company	iv
Rothsay Collegiate School	49
Royal Trust	53
Thompson Adams	35

INSULIN PREPARATIONS

40 and 80 units per cc.

INSULIN - TORONTO - PROTAMINE ZINC INSULIN

NPH INSULIN - LENTE INSULIN

ULTRALENTE INSULIN - SEMILENTE INSULIN

In Canada, and in most other countries, Lente Insulin, Ultralente Insulin and Semilente Insulin have been found useful in many cases of diabetes mellitus. Lente Insulin has a degree of prolongation of blood-sugar-lowering similar to that of NPH Insulin. Its effects may be made more prompt and of shorter duration by decreasing the dose and adding to each dose the appropriate amount of Semilente Insulin for administration simultaneously in one injection. Alternatively, the addition of Ultralente Insulin to each dose of Lente Insulin will prolong the blood-sugar-lowering effect.

Packages of the last three preparations are labelled with the official names prescribed by Canadian regulations. These official names, together with appropriate label designations to enable patients to distinguish more readily one form from another, are set out in the following table:

LENTE INSULIN

Insulin Zinc Suspension—(MEDIUM) Label Designation

M

ULTRALENTE INSULIN

Insulin Zinc Suspension—(PROLONGED) Label Designation

P

SEMILENTE INSULIN

Insulin Zinc Suspension—(RAPID) Label Designation

R



CONNAUGHT MEDICAL RESEARCH LABORATORIES

UNIVERSITY OF TORONTO

1755 Steeles Avenue West, Willowdale, Ontario

Established in 1914 for Public Service through Medical Research and the development of Products for Prevention or Treatment of Disease.

A booklet entitled "Products in the Service of Medicine" (1968 ed.) is available on request from Connaught Laboratories.