

## The NOVA SCOTIA MEDICAL BULLETIN

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### EDITORIAL

#### THE COMPROMISE WITHIN

After the basic instincts of self-preservation and procreation of the species, the third most important human emotion is the desire for power over one's fellow man. Unfortunately, in a Puritan-oriented society, the first two tend to be suppressed whereas the last is often elevated to a virtue.

More and more, it is being pointed out to us by Cassandras in the profession, that unless the individual members of the Society interest themselves in the reorganization of the Society, we shall become servants of the state, our freedom shall be lost, our patients shall become nameless numbers and ourselves nameless wonders.

While this battle to save the organization is commendable, may it not be possible that many of the supposed disinterested members may have become disenchanted with their fellow doctors and their true aims? Do they really feel that Medicine is capable of cleaning its own house? Do they really feel medical bureaucracy is superior to state bureaucracy? Is free enterprise truly superior to socialism—or only partly? (Consider for a moment our difficulties with this last argument in discussions with Africans or Asians).

Witness the almost open struggle between the general practitioners and the specialists. Is a specialist one who holds a formal qualification or is he one who confines his practice to the specialty, or both? Is the control of medical teaching facilities by the specialist truly a torch from Hippocrates or is it in more modern context mere "status seeking." On the other side of the coin, is the income of those in medical practice in line with ability and work done, or not?

In the May, 1960 (Page 143) issue of The Nova Scotia Medical Bulletin, it was pointed out that doctors were quite capable of making many "compromises without"; these are often seen and easily criticized. However, many compromises with what individuals know to be right occur within the profession and are passed over or are not noted publicly. There is one compromise many of us are unable or unwilling to make. Only if we are willing to compromise our personal ambitions within the profession can Medicine survive as we know it. Whether we are capable of this is for each doctor to answer himself.

"Most people do not do this, but take refuge in theory and think they are being philosophers, and will become good in this way, behaving somewhat like patients who listen attentively to their doctors, but do none of the things they are ordered to do. As the latter will not be made well in body by such a course of treatment, the former will not be made well in soul by such a course of philosophy."<sup>1</sup>

J. H. Q.

<sup>1</sup>(Aristotle: Ethics).

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## PRESIDENT'S ADDRESS

THE 107TH ANNUAL MEETING OF  
THE MEDICAL SOCIETY OF NOVA SCOTIA

June—1960

W. A. HEWAT, M.D.  
Lunenburg, N. S.

Mr. Chairman, Distinguished Guests, Ladies and Gentlemen:

It is customary at this time for the President of the Division to report on what he considers some of the important developments during his year in office.

The past year has been for me a very interesting and instructive one. It began with our Annual Meeting at Keltic, where we were royally entertained by the Cape Breton Branch of the Nova Scotia Division. Following this meeting, Nova Scotia was well represented at the joint B.M.A., C.M.A. meeting at Edinburgh.

The Clinical Discussions at Edinburgh were extremely interesting and it was of great interest to note that when differences of opinion arose, each defended the opinion he expressed vigorously and in no uncertain terms. It was a refreshing change from many of our meetings where too often there is a tendency to be agreeable for the sake of harmony rather than conviction.

Shortly after my return from Europe difficulties between the Nova Scotia Hospital Insurance Commission and the Radiologists were renewed. This is not surprising for a number of reasons. I am not convinced that all Radiologists are in favor of a single plan for dealing with hospital agreements. I think the same problem will arise with any group whose professional activities are wholly or partially controlled by the Welfare State. After all if you apply the principle of Socialism to a group which by tradition is made up of individualists, there are bound to be difficulties. The adjustment and reconciliation of these differences have occupied a great deal of time and thought on the part of your committees concerned.

This may become a recurring problem, and while an Affiliated Group may expect every support from the Division, it cannot expect the Executive Committee or any other committee to make policy or procedural decisions if no satisfactory plan or compromise can be reached within the group itself. Also the Executive Committee will quite naturally respect the opinion of your committees which are directly concerned with and have carefully studied these problems.

At the last Annual Meeting Dr. Devereaux brought to our attention the interest of Government in Medicine. Since that time I have heard a variety of opinions expressed, that the problem is so quiescent that we should "Let sleeping dogs lie" on the one hand, to the belief that some form of State Medicine is inevitable on the other.

The decision in Saskatchewan to make Insured Medical Services a matter of government policy and an issue in the last provincial election in that province, brought the matter of Insured Services into sharp focus, and it became an important part of the deliberations at Banff. From those deliberations came the C.M.A. Statement on Medical Insurance as follows.



## THE CANADIAN MEDICAL ASSOCIATION BELIEVES THAT:

1. The highest standard of medical services should be available to every resident of Canada.
2. Insurance to prepay the costs of medical services should be available to all regardless of age, state of health or financial status.
3. Certain individuals require assistance to pay for medical insurance.
4. The efforts of organized medicine, government and all other interested bodies should be coordinated towards these ends.
5. While there are certain aspects of medical services in which tax-supported programs are necessary, a tax-supported comprehensive program, compulsory for all, is neither necessary nor desirable.

Why are we disturbed by increasing State intervention in Medicine, when we accept without question other socialistic measures such as Common School Education, Streets, Highways, etc.?

(1) We lack a clear conception of the ultimate aim of this intervention and the manner by which it is to be achieved. Is the Plan National Health Insurance, or National Sickness and Accident Insurance? If it is National Health Insurance, should not the Government Plan include the Socialization of all the basic requirements of life, and plan that all should have adequate food, shelter and clothing in order to promote good health and reduce the incidence of sickness to a minimum?

This certainly is implied in the title, National Health Insurance, and I think the time has come when we need a clear definition of terms. It is for this purpose that the C.M.A. has adopted the term Insured Medical Services, although government still refers to National Health Insurance.

(2) Freedom of thought, speech and action have been the tradition of our universities and professions. It would be naive to say that this can continue as it has in the past, under a National Health Insurance Plan.

That public funds collected by taxation and expended by government bodies must be closely supervised, is an inherent precept of government. As the University or Profession becomes more and more dependent on Public Funds it loses its traditional independence.

(3) Many people believe that the so-called Health Insurance Plan will not affect Doctor-Patient relationship. They expect to get much the same type of treatment to which they are accustomed, except that they will not have to pay directly for it. Experience has proven otherwise, that it is impossible to have socialism without regimentation, coercion, or both.

People to whatever group they belong have certain fundamental characteristics which are unchangeable; their intelligence, their conscience, their emotional stability, etc.

Medicine is a changing progressive Art in which Opinion is more important than Truth. It has a thin veneer of science coating it and is dotted with expanding islands of scientific knowledge. This combination which goes under the general heading of Medical Practice is to be applied by people of certain unchangeable characteristics, to others of equally unchangeable characteristics. It can be applied only by a Profession largely comprised of individualists working on patients who are individuals. These are the reasons why the practice of medicine, as we now understand it, and the present Doctor-Patient relationship would be jeopardized in a system of regimented social-



ized medicine, and why the medical profession finds difficulty in supporting a tax supported compulsory Health Insurance Scheme.

I believe that a tax supported comprehensive program compulsory for all is neither necessary nor desirable and submit the following argument.

(1) Although as I have said I am not by nature a Socialist, I recognize that we live in a Welfare State. This Welfare State has what it calls a Health Insurance Plan but as the administration of Health measures comes under the jurisdiction of the Provinces, the Plan cannot be put into operation without Provincial sanction.

(2) Labour has a Plan. Anyone who heard Mr. Goldberg's address to the C.M.A. at Banff must realize that Labour has a plan which it intends to implement either through the employer, government, or both. The implications of that address were subtle and no doubt was left in my mind that once put into effect Labour would gain a large measure of control over Medicine.

Mr. Goldberg stated that the present so called fringe benefits were inadequate and must be expanded. His contention was that since both Medicine and Labour were interested in the same thing, the welfare of the worker and his family, they should work together and form clinics for the worker and his family.

But if Labour controls the funds from the fringe benefits it will soon control Medicine.

It would appear to me that ideologies of Medicine and Labour with regard to Insured Medical Services are worlds apart and much negotiation and compromise will be needed to bring them together.

(3) Medicine has no plan, at least as far as the Division is concerned. We have, however, all the necessary ingredients for making one. They consist of a Grade A Medical School, Teaching Hospitals and, in Maritime Medical Care, an organization already experienced in prepaid medical insurance plans.

A great many Nova Scotians already have insurance against illness in some form or other, and the population insurance wise can be divided into three groups.

1. Those who can and do insure.
2. Those who can't insure.
3. Those who won't insure.

The last two groups are from our point of view the crux of the problem.

However a survey could be made to determine which members of the group not already holding insurance of their choice should be insured. Then invoking the C.M.A.'s statement of policy on Medical Services Insurance, there could be brought together government, employers and all others interested to work out a plan to insure these through M.M.C.

This plan will be most successful if it covers the major catastrophies and leaves the patient responsible for the minor ailments to prevent overloading of our present facilities. I realize that there is a borderline where it is difficult to decide which illnesses are catastrophic and which are not. This matter will require a medical referee.

I would also suggest that the insurance should be based on the Nova Scotia Division's Fee Schedule. The Profession's contribution would be the calculated risk of collecting for minor illnesses and for a per centage of major illnesses.

I have already said that the expenditure of public funds must be supervised. By a few changes in its bylaws, Maritime Medical Care could pro-

vide for the appointment by government to its Board of Directors and allow the non-professional members to be appointed by Industry.

These suggestions for a Plan of our own are a direct result of my recent trip to the C.M.A. General Council at Banff, and are not necessarily the opinion of your Executive Committee. It can be said without exaggeration that the Prairies are aflame with bitter arguments. Also it can be said that both sides could have used better judgement, more moderation and less invective.

Before we find ourselves in the same predicament, let "all interested parties" get together and work out a solution.

There are many other accomplishments which should be reported at this time. The acceptance of a single set of forms for reporting all Sickness and Accident Claims and the reorganization of Maritime Medical Care under the capable leadership of Dr. Murray Fraser would be to name two.

In my opinion the most important of all matters before us is the question of Prepaid Insured Medical Services. The time has come to stop talking about what we are not going to do and instead lay down a plan which we can accept as a body, and to which we will adhere.

I wish to thank the officers of this Division and chairmen and committee members for their work throughout the year. I would extend my personal thanks to my medical confreres in Liverpool who have borne the brunt of organizing this convention, to Dr. Parsons and Mrs. Parsons for their long trip from Alberta to be with us and to all who have entertained and helped to make this meeting a success.





## DOCTORS, DRUGS AND SOCIALIZED MEDICINE

SINCLAIR G. ALLEN\*

*Halifax, N. S.*

### DOCTOR-PATIENT RELATIONSHIP, CONSULTATION AND THE CHANGING OF DOCTORS

Of all the relations between man and man, probably none is more important than the relation of doctor and patient. The patient generally has complete confidence in his doctor—accepting his advice, placing his life on occasion in full control of the medical adviser. This confidence and trust is not something that just happened. It has been built up through years of devoted and self-sacrificing service on the part of the medical profession. These medical men of past generations did their work well and built their standards high. It is as a result of their efforts that today the medical profession generally is accepted by all mankind with the utmost confidence.

Of course, through the years, one develops a special confidence in one's own physician; it is, aside from the practice of medicine, a friendship built on a solid foundation of respect. It is only natural, therefore, that each has his or her favourite doctor and yet, as mentioned before, because of the reputation of the medical profession as a whole, when one's own particular doctor is not available, one does not in most cases object to accepting the services of another. Again, as in all similar situations, a person in trouble of any description turns usually to friends of long standing. However, help from *any* source is gladly accepted by most people in serious situations. It may be assumed, therefore, that, as long as the standards of the medical profession remain at their present high level, the changing of doctors is not of paramount importance. The most desirable situation, however, must remain the freedom to choose one's own personal physician.

### COST OF MEDICAL CARE

The cost of medical care has gone far beyond the means of many families in low and even average income brackets. Before the advent of free hospital care in Canada, there were many families whose income barely paid for the necessities of life. When, as sometimes happened one or more of the members of such a family suffered from a disease requiring medical care and hospitalization, it was such a severe financial blow that it took years to recover. Often, too, in many such cases the financial burden became so heavy that the breadwinner found it impossible to pay up and survive. This often resulted in hospitals being saddled with uncollectable bills and in doctors being unable to collect fees. Hospital insurance has somewhat relieved this situation. Whether the cost was too high or not, is, in my opinion, beside the point. The point is that many families just do not have the financial means to pay for long or expensive illnesses. To illustrate—hotels charge so much per day; add to this the cost of delivering three meals per day and then add to this the cost of the many other services provided by hospitals and it is easily seen why hospital expenses must be high. To consider the question further by the same illustration: how many people of average income could, without great difficulty, send a member of the family to an hotel for one, two, or three weeks with meals

\*Vice-President, Halifax, Dartmouth and District Labour Council (C.L.C.).

supplied in bed? Add to this the cost of the many other services provided by hospitals and then the cost of surgery and other medical service. The price becomes prohibitive. Many breadwinners attempted to and often did pay fully for the services rendered but at what cost? Families went without, children were denied things they should have had and generally the event of a serious illness crippled the family for years. The cost was and is high!

#### HOW MUCH SHOULD A PATIENT BE TOLD?

The answer to this question would, I believe, depend on the patient and on the relationship that exists between patient and doctor. Generally speaking, I believe that the full situation should be told the patient but again the competent doctor should be the better judge—any opinion given on a subject such as this can only be a personal opinion. Many people cannot be told the truth about anything; living in a false world, they cannot be told anything realistic if it tends to be outside their own belief. On the other hand, there are people who are satisfied with, nothing but the full story—the truth, good, bad or indifferent. No conclusion can be reached in my opinion and I would, therefore, suggest that the matter be left completely in the hands of the individual's own physician.

#### THE COST OF DRUGS

While it must be admitted that the cost of drugs is high, it must also be remembered at the same time that the final cost of producing drugs must be expensive. Let us consider for a moment the number of people and firms that have to show a profit from the time a drug is perfected until it eventually reaches the patient. The high cost of drugs is a product of the system under which we operate. Many arguments may be advanced to show that drugs which bring about the relief of pain or even the saving of life are worth the price at any cost, but properly regulated, there can be no doubt but that the same pain killers and life savers could be made available more cheaply to the person of average income.

#### "KICKBACKS" FROM DRUGGISTS

This is a story told every so often but as yet no definitely supported proof has been provided. It may be true that instances of such a practice could be found, but that would only prove that a few people have been guilty of misconduct or whatever such actions are called. In every walk of life, individuals stray from the accepted path but all in that group should not be so classified. On the other hand, if it should ever be proved that such a situation does exist to any large degree, then the penalty should be most severe. The situation of a group of persons thus benefiting financially from the misfortunes of others would be most disgraceful.

#### IS THE FAMILY DOCTOR DISAPPEARING?

It is often said that the general practitioner is rapidly becoming a man of the past. If this is so, then it is to be regretted, for there can be no doubt that the family doctors are the group that gave to the medical profession the high degree of confidence it enjoys today. It now seems that a young doctor graduates from university, practises as a general practitioner for a few years, pays off his bills, accumulates a few dollars and, some time later, advises that he is now a specialist with hours from 2:00 P.M. to 3:00 P.M. three days a



week, and his fees look like the national debt. While it may be true that, outside office hours, the specialist can be a very busy man, it is hard to convince the general public of this. (The public requires education on this point. Ed.)

It is agreed of course that the specialist is necessary in certain cases and it can also be agreed that, because of special skills and additional expense in acquiring these skills, he is entitled to receive extra remuneration. At the same time it must be remembered that his high fees tend to make his services available to only a limited number of people. It seems, that the business machine operation of most specialists' offices does not lend itself to the good public relations built up by the friendly family doctor.

If the family doctor disappears, then future generations will not know the comfort brought to sick persons by that highly-respected man of this and past generations.

#### DOCTORS ON WEEKENDS AND EMERGENCIES

It is agreed by all sensible persons that doctors should be free to enjoy week-ends for whatever type of activity they may find relaxing. At the same time, it is obvious that medical services must be available on week-ends and in emergencies. The very nature of medical practice makes it necessary that such services be available at all times. No person can guarantee that he or she will not be ill at any given time—perhaps science at some future date may be able to encompass this but, in the meantime, medical services must be made available. How this can be maintained the doctors alone must decide. There is nothing worse than not being able to secure medical care when sudden illness strikes or an emergency arises. Generally speaking, however, doctors seem to be nearly always available. It seems to the layman that here is a situation which can be provided for by co-operation and planning. It may be true that in some centres such occasions as week-ends and emergencies are provided for, but the general public usually does not know about this service.

In many industries where public services are required on a twenty-four hour, seven-day a week basis the situation has been met and there seems to be no great difficulty in providing the required services. It must be admitted that doctors are not as numerous as the persons required for other types of after-hour services, but at the same time it would seem that there is a sufficient number available in large centres to provide for emergency situations. When the general practitioner was the doctor of the day, there seemed always to be a doctor available but with the trend to specialization the problem seems to have become more acute. As yet this problem of the emergency or week-end doctor seems to be not too serious, but with greater specialization predicted for the future, it should be considered now and resolved by the medical profession.

#### SOCIALIZED MEDICINE

Socialized medicine like to-morrow's rising sun is bound to come—if we survive. It may also be true that in certain instances socialized medicine is already here—or at least small samples of it. It is evident to a degree in disasters, emergencies, etc. In these instances all who require medical care are given it free. It is also true that many persons of limited or no means are in certain circumstances provided with needed medical care. In such cases the medical practitioner or the community bears the cost of such medical services.

When socialized medicine comes it should be all-inclusive; every type of medical care necessary for all kinds of illness should be provided—dental, eye, mental, etc.; it should be available to every citizen who may need it.



SYMPOSIUM ON OEDEMA  
PART IV: CARDIAC OEDEMA

ROBERT L. COUPE, M.D.\*

*Montreal, Que.*

Cardiac oedema is a manifestation of cardiac failure. As a preliminary to its study therefore, the function of the heart in health and when it is failing will be considered. The function of the heart is to distribute blood, carrying essential substances, to the rest of the body and transporting waste products, for eventual excretion. The heart thus acts as a pump. Increased requirements are met by a rise in cardiac output, due largely to a rise in carbon dioxide levels in the blood as a result of increased metabolism. Raised carbon dioxide levels in the blood have a central action on the vasomotor centre in the brain stem increasing sympathetic activity. This in turn results in increased venous return from contraction of the splanchnic blood reservoirs. The local vasodilator effect of carbon dioxide in muscle tends to decrease the circulation time and also increase venous return. Any rise in venous return causes some dilation of the right atrium of the heart with increased contractile power and greater stroke volume, according to Starling's Law. Cardiac output is thus increased.

When the circulatory efficiency is threatened as by hemorrhage or fluid loss from burns, compensatory mechanisms come into play. The fall in cardiac output stimulates the vasomotor centre and vasoconstriction occurs. In addition, the secretion of no-adrenaline is increased by the same mechanism and tends toward the same end.<sup>1</sup> Thus blood pressure is maintained at the expense of decreased arterial volume. At this stage adaptive mechanisms to conserve body fluids come into play, the end result being decreased output of urine. There is decreased renal blood flow due to the decreased arterial filling and a lower filtered plasma load. However, the major fluid conserving mechanism is hormonal. There is an increased secretion of aldosterone, which acts on the distal renal tubules to reabsorb sodium ions to a greater extent and water as an obligatory process at the same time. Experimentally, changes in blood volume, pressure or flow, have been shown to alter the rate of aldosterone secretion<sup>2,3</sup> The release of aldosterone itself is under hormonal control.<sup>4</sup> The site of secretion of the aldosterone stimulating hormone has been shown to be the diencephalon.<sup>5</sup> The site of the vascular receptors which stimulate the production of aldosterone stimulating hormones when they respond to a decreased arterial flow is not known, but since changes in intracranial pressure affect urinary sodium excretion,<sup>6</sup> it is possible that the receptors are intracranial.<sup>7</sup> Thus the secretion of aldosterone acts as a homeostatic mechanism to maintain a constant degree of arterial filling. Its injection causes an increased cardiac output secondary to increased retention of extracellular fluid and a raised mean circulatory filling pressure. A similar effect can be obtained by salt loading in the normal individual.<sup>8,9</sup>

THEORIES OF CONGESTIVE CARDIAC FAILURE:

- (1) Backward theory: (a) Incomplete emptying of cardiac chambers.  
(b) Dilatation of chambers with increased contractile power. (Starling's Law)

\*Former Resident in Dept. of Medicine, Dalhousie University and the Victoria General Hospital, Halifax.



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- (c) Increased venous pressure.
  - (d) Decreased fluid reabsorption from extra cellular space into venous system. (Starling's hypothesis)
  - (e) Oedema formation.
  - (f) Back pressure on kidneys.
  - (g) Impaired sodium excretion.
  - (h) Aggravation and perpetuation of the oedema.
- (2) Forward Theory:
- (a) Decreased cardiac output<sup>10,11</sup>
  - (b) Decreased arterial filling, vasoconstriction and redistribution of blood (arterial—> venous)<sup>12</sup>
  - (c) Decreased renal blood flow<sup>13</sup>.
  - (d) Decreased glomerular filtration rate<sup>14</sup>.
  - (e) Decreased sodium and water excretion.
  - (d) Oedema formation and increased venous pressure.

The forward theory presupposes retention of sodium and water before a rise in venous pressure. This has actually been shown to be the case.<sup>15</sup> The forward theory as outlined, however, does not explain all the experimental observations, notably that the glomerular filtration rate is not always lowered in congestive cardiac failure, but may be normal or raised.<sup>16</sup> Also a reduction of glomerular filtration rate by various means does not result in oedema.<sup>16</sup> The rise in sodium excretion noted when cardiac failure becomes compensated is more than can be accounted for by the rise in glomerular filtration rate alone<sup>17</sup>. For this reason an alteration in tubular function was postulated with the amount of sodium excreted varying inversely with the degree of cardiac failure. Later work demonstrated the sodium-retaining properties of aldosterone and in congestive failure it has been possible to correlate the degree of cardiac failure with the level of sodium retaining substances excreted in the urine.<sup>18</sup> A concomitant rise in the antidiuretic activity of the blood in congestive cardiac failure has also been demonstrated.<sup>19</sup>

Thus oedema formation in cardiac failure is mainly due to abnormally increased secretion of aldosterone secondary to inadequate cardiac output, with raised venous pressure a secondary factor in its formation and perpetuation.

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# EXFOLIATIVE CYTOLOGY AND LUNG CANCER

C. P. HANDFORTH, M.B.\*

They murmured, as they took their fees,  
"There is no cure for this disease."

H. Belloc

The purpose of this article is to discuss the use of exfoliative cytology in the diagnosis of bronchial carcinoma, and to describe methods of preparing specimens to be sent to the cytologist.

The value of searching for malignant cells in the sputum has to be considered in relation to the natural history and prognosis of the disease; many patients with bronchial carcinoma have widespread metastases at the time of onset of their symptoms, and few can be cured. By contrast, carcinoma of the uterine cervix can be diagnosed, by cytology, at a very early stage when the cure rate is high. For this reason cervical exfoliative cytology is of more clinical value than sputum cytology. However, occasional patients with bronchial carcinoma can be cured, and therefore early diagnosis by cytology is essential. Often, cytology is the only available laboratory method of confirming the clinical diagnosis before thoracotomy.

## THE GENESIS OF BRONCHIAL CARCINOMA

The normal bronchial mucosa is composed of a single layer of ciliated columnar cells resting on one or two layers of deeper "reserve" cells. The reserve cells are analogous to the basal cells of the epidermis, and, like these, divide and mature to replace cells lost from the surface. Bronchial carcinomas arise by uncontrolled proliferation of the reserve cells. In these tumours the cells may remain undifferentiated or may mature to resemble squamous or, less often, columnar epithelium.

Modern concepts of carcinogenesis suggest that malignant tumours arise focally in a wide area of prepared or initiated tissue. There is evidence that this occurs in the bronchial mucosa, though the preparatory mechanism is not always associated with morphological changes. However, when these changes are present they consist of hyperplasia of the reserve cells, squamous metaplasia, and pre-invasive carcinoma in situ. These pre-malignant changes are not necessarily irreversible; they may regress or persist unchanged for many years. Their clinical significance is that the bronchial mucosa has been exposed to the preparatory or initiating mechanism, and that the chances of carcinoma developing are greatly increased.

## EXFOLIATIVE CYTOLOGY

The pathological diagnosis of malignancy is based on the presence of three features, cellular anaplasia, invasion of surrounding tissues, and metastases. Often only one of these can be demonstrated, and in the study of exfoliated cells the only feature of malignancy is that of anaplasia. In occasional malignant tumours the abnormal cells mature so well that cytological diagnosis is impossible; but bronchial carcinomas are usually composed of immature cells which can be recognized cytologically.

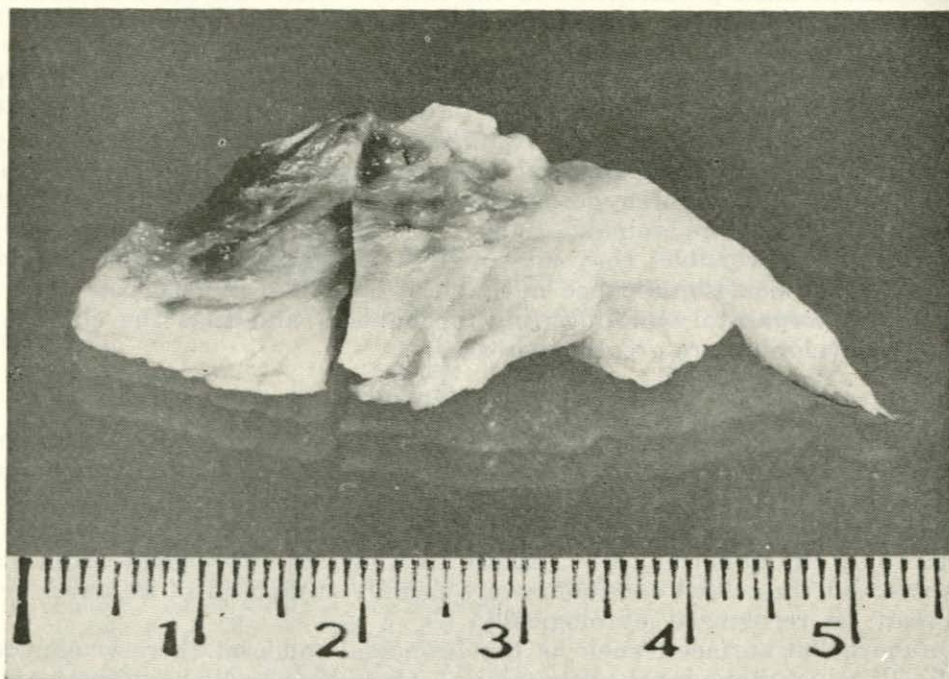
On epithelial surfaces, such as the bronchial mucosa, there is continual loss of cells which have reached maturity. Once these cells have lost contact with the mucous membrane, which is their source of nutrition, they undergo necrosis. In malignant tumours the cells appear to be less cohesive than

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normal and a large number of cells are exfoliated, so that even a small tumour on a large epithelial surface may contribute sufficient malignant cells for detection by cytology. Exfoliated malignant cells, just like cells shed from normal surfaces, undergo necrosis and rapidly become unrecognisable.

In the sputum there are normally exfoliated columnar cells, epithelial squames from the upper respiratory tract and mouth, and dust-laden macrophages. Specimens which do not contain macrophages or columnar cells are reported by the cytologist as unsatisfactory, because they consist mainly of saliva in which malignant cells are unlikely to be present. Abnormal cells may be found in the sputum in many chronic inflammatory conditions as well as in patients with pre-malignant changes or a carcinoma. In specimens which have been well prepared and rapidly fixed, the cytologist can be surprisingly accurate in distinguishing malignant from non-malignant atypical cells, but if the specimen is poor and the cells degenerate this distinction may be impossible. Therefore, to obtain the best results from cytological examination of the sputum, the clinician must obtain satisfactory fresh specimens which are not contaminated with saliva, and must ensure that these specimens are promptly fixed so that the cells do not degenerate. He should also warn the cytologist if the patient has any chronic inflammatory disease which might cause atypical cells to be present.

The results of examination of the sputum for malignant cells may be negative, positive, or doubtful; also the presence of benign atypical cells may be reported.



Most patients with bronchial carcinoma have malignant cells in their sputum at some stage of their disease. This specimen is a portion of tumour tissue, 5 cms. long, which was expelled by coughing. Tissue such as this is rarely seen, but can be fixed in 10% formal-saline, and then processed like a biopsy.



Negative reports do not exclude malignancy, even though some published accounts suggest that most bronchial carcinomas can be detected by cytology. In several series, 80 to 90% of patients with proven bronchial carcinoma have had malignant cells in their sputum at some stage in their disease. These series include only patients in whom at least three satisfactory sputum samples were examined. In practice, the ideal of 80 to 90% detection in the early stage of the disease is unlikely to be obtained, partly because the specimens submitted are often unsatisfactory, also because the cytologist must be very conservative about the interpretation of isolated abnormal cells. Once the diagnosis is known the interpretation of abnormal cells becomes much easier.

False positive reports are undesirable as they may lead to unnecessary thoracotomy, with possible serious consequences. Because of this cytologists are conservative about diagnosing malignant cells in the sputum, and positive reports are based on the finding of groups of abnormal cells which are undoubtedly anaplastic. It is not always possible to distinguish cells exfoliated from in situ and invasive carcinomas, so occasional patients will be found who have malignant cells in their sputum but no demonstrable invasive carcinoma. These patients are difficult to manage clinically because the in situ lesion may be bilateral, and also there is the possibility that a small invasive carcinoma is present but has not been discovered.

Atypical cells, which are reported by the cytologist as benign or of doubtful significance, are considered as abnormal even though they are not frankly malignant. The reason for the presence of these cells has to be decided clinically. They may be due to chronic inflammatory disease, or they may be an indication of pre-malignant change due to heavy smoking. The extent of further investigation will then depend on clinical assessment of the patient.

#### COLLECTION OF SPECIMENS

The patient should be informed that the object of the test is to examine secretions from the bronchial tree and not saliva or muco-pus from the nasopharynx. The use of a mouth wash often helps to reduce contamination of the specimens with saliva.

Some patients can only produce sputum when they awake in the mornings, but early morning specimens are not necessarily the best for cytology because the cells which they contain have had time to degenerate. It is more important to obtain fresh specimens of sputum than to adhere to a fixed ritual about the time of collection. At least three fresh specimens should be submitted for cytological examination, and there should be no hesitation in sending further specimens if there is a possibility that the patient has an operable tumour.

The patient may cough the sputum directly in to fixative (70% alcohol) or produce the fresh unfixed specimen. The fresh specimen should be less than one hour old, and should be kept cool (the sputum container should not be left standing on a radiator or sterilizer). Thin films of the fresh sputum are then prepared on clean glass microscope slides and are placed in a jar of fixative while they are still wet. The fixative used for this purpose consists of equal parts of 95% alcohol and ether.\* If the films are allowed to dry before fixation the cell detail is obscured. Thin films can be more easily prepared from tenacious sputum if it is mixed, on the slide, with a little isotonic saline solution. After fixation the slides are kept moist with glycerine and can be sent to the cytologist.

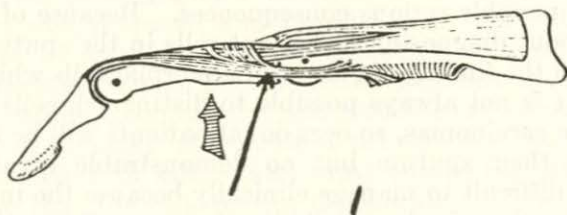
\*A commercial fixative "DRIFIX" is also available and may be found to be more convenient than the alcohol-ether mixture.

# THE RETINACULAR OR LINK LIGAMENT OF THE DIGITS\*

R. A. MOREASH, M.D.

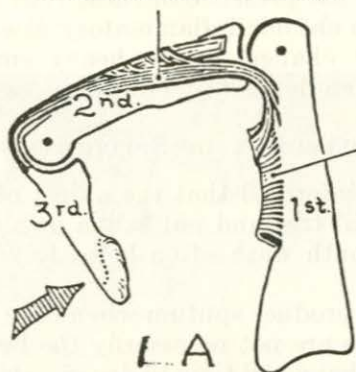
Berwick, N. S.

In 1949 Landsmeer described what he called the retinacular ligament of the finger in the *Anatomical Record*. In 1915, Haines described the same ligament in the *Journal of Anatomy*. He called it the link ligament. In 1952, in the fifth edition of his *Method of Anatomy*, Grant described this ligament.



L.L. - LINK LIGAMENT

Retinacular or link lig.



What is this link ligament? Haines describes it in this way. Dissection reveals two ligamentous bands, one on either side of the digit, passing from the sides of the distal part of the proximal phalanx, where some of the fibres are continuous with the proximal annular fibres of the fibrous flexor sheath, across the collateral ligaments of the middle joint, to join the extensor tendon on its way to the terminal phalanx. Drawings 1 and 1A show link ligament.

So long as these "link" ligaments are intact, the linked motion is found, but when they are cut it is lost. Forceful flexion of the terminal joint puts tension on the ligaments, which then tend to pull the proximal phalanx into partial flexion.

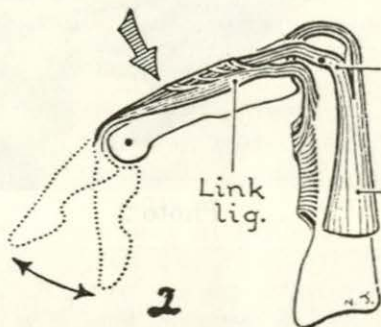
Grant says the ligament spans the second phalanx, crossing dorsal to the



axis of the distal interphalangeal joint and volar to the axis of the proximal joint.

#### THE DIFFERENCE BETWEEN LATERAL BAND OF THE EXTENSOR EXPANSION AND THE LINK LIGAMENT

If you forcibly flex (passively) the second phalanx on the first, the third phalanx cannot be extended voluntarily; it is flail, as is depicted in drawing 2. Grant says this is due to the fact that the lateral bands of the extensor expansion cross so close to the axis of movement that they are slack and ineffective.



The link ligament does not in itself initiate motion. The proximal part of the link ligament is separate from the extensor expansion. Movements of the other joints make it (link ligament) act. The lateral band of the extensor expansion, as part of a muscle, does initiate motion.

#### ULNAR NERVE PARALYSIS

I became interested in the link ligament when I was trying to explain the position of the fingers in a case of ulnar nerve paralysis.



Photo 1

Here is a case of ulnar nerve paralysis (photo 1). The lesion is above the elbow, which means that the two medial tendons of the flexor profundus are paralyzed, which would not occur if the lesion were below the elbow, distal to the innervation of the long flexor profundus.

Photo 2 shows guttering between the metacarpals due to atrophy of the interossei muscles. A depression is present between the first, and second metacarpals due to atrophy of the adductor pollicis and interossei muscles.

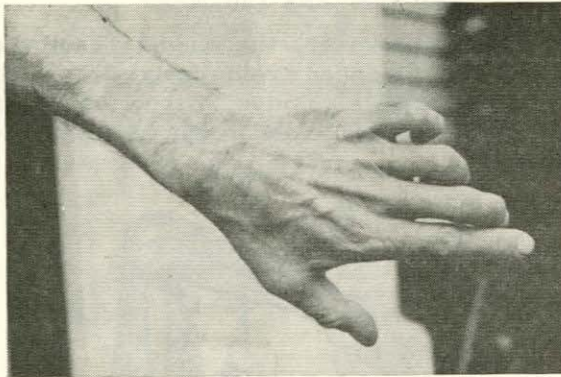


Photo 2

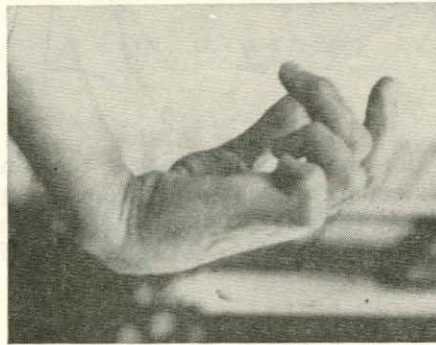


Photo 3

Photos 2 and 3 show joint positions.

There is hyperextension at the metacarpo phalangeal joints because the two (medial) lumbricals are paralyzed and the extensor communis digitorum is acting. There is flexion at the proximal interphalangeal joint because the flexor sublimis is acting and the two medial lumbricals and the interossei are paralyzed.

What about the distal joint? There is no extension by extensor tendon because of paralysis of medial two lumbricals and interossei. The proximal joint is flexed which means the link ligament is relaxed, therefore it is not pulling the distal phalanx in extension and the only way it can act on the distal phalanx is to extend it. The profundus is paralyzed and is not exerting any active pull in flexion. However, the profundus tendon, even though paralyzed, pulls the distal joint in flexion because it is stretched by the fact that there is hypertension at the metacarpo phalangeal joint.<sup>1,2</sup> In spite of these statements it is well to keep in mind what McGregor<sup>3,4</sup> states. He says the matter is not quite so simple and that when the hand is fully flexed at the wrist, the extensor digitorum extends the second and third phalanges. The joint should be flail. In a recent case it is, and passive movements consist of complete extension and flexion to a right angle.

In this particular case, there is no active and little passive movement



because of trophic changes due to lack of nerve supply and lack of use for many years—over twenty-five years.

In short, there is nothing acting on the distal joint—the profundus is paralyzed, the interossei and the inner two lumbricals are paralyzed and the link ligament as it crosses the proximal interphalangeal joint is relaxed.

#### SURGICAL IMPORTANCE OF LINK LIGAMENT

If the tendons of the flexor sublimis and the flexor profundus are severed, especially in the flexor sheath, or for that matter any place along their course, it is not essential that the flexor sublimis tendon be sutured. It can be disregarded and a good result can be obtained by suturing the flexor profundus tendon only. The ability to flex at proximal joint without flexion at other joints is lost.

The late Dr. Judson Graham in conducting a clinic on hand injuries in Halifax a few years ago said that that's what he did. Why do we get a good result by suturing only the profundus tendon? You might answer that the flexor profundus flexes all the joints of the finger. Professor Jock Cameron, head of the department of Anatomy at Dalhousie for many years, says so in his book, *Regional Anatomy* 1931.

Landsmeer says that although the deep flexor is inserted on the terminal phalanx, it causes the series of phalanges to flex. With few exceptions it is impossible, by actual muscular effort, to flex the distal interphalangeal joint by itself and passive flexion of the distal phalanx also is followed by flexion of the proximal interphalangeal joint, unless prevented by external force. He says the reason for this is that the shifting of the dorsal aponeurosis along the second phalanx, produced by flexion of the distal phalanx, causes flexion of the proximal interphalangeal joint.

In other words the effect of contraction of the flexor profundus is to a large extent determined by the arrangement of the tendinous elements in the dorsal aponeurosis.

CALLANDER (*Surgical Anatomy—Saunders* 1940)—in referring to the tendons of the flexor profundus digitorum says their primary action is to flex the terminal phalanges and, continuing this action, to flex the remaining phalanges and finally the hand. He does not mention the link ligament.

I feel myself that the link ligament plays a part in getting a good result when the deep flexor tendon is sutured and the sublimis disregarded.

Let us consider a case of trauma to the proximal interphalangeal joint. The joint is damaged to such an extent that there will be no motion in the joint. The finger otherwise is normal. How should this be treated? A more useful finger will result if the joint is put up in flexion.

Man, according to Dr. Martin, former professor of Anatomy at McGill University, is of a grasping nature and for that reason his flexors are stronger than his extensors. Man's hand is more useful if he can hold things in it. A finger immobile in flexion accomplishes this better than one extended at that joint. A finger, flexed at the proximal joint is better cosmetically and also results in a relaxed link ligament as it passes volar to the joint. This allows a greater degree of flexion at the distal joint.

Haines says these (link) ligaments limit flexion in the distal joints of the finger when the middle joint is extended. Grant says extension of the proximal joint results in the distal joint being pulled into nearly complete extension. Sufficient reason for not putting it up in extension.



Supposing one is confronted with a stiff joint—Proximal finger joint—ankylosed in extension. And again the finger is otherwise normal. According to what I have said more flexion at the distal joint can be obtained by breaking down the proximal joint and putting it up in flexion.

What about merely cutting the link ligaments just proximal to the proximal joint or for that matter any place along their course? This should obtain a little more flexion at the distal joint. However, although the procedure may be practical, it would not be worth while, inasmuch as the extra amount of flexion obtained at the distal joint would not make the finger that much more useful while the proximal joint is extended.

Supposing the extensor tendon is cut just beyond or distal to the proximal finger joint. What would be the situation here? If cut proximal to the proximal joint, the link ligament is not a consideration in determining treatment. Grant says—as I said before,—extension of the proximal joint results in the distal joint being pulled into nearly complete extension by the retinacular ligament. What does this mean? It means that even if the extensor tendon is not sutured, the distal joint can be extended almost completely by extending the proximal interphalangeal joint. I do not advocate that the extensor tendon be not sutured because of this action of the link ligament. Indeed it should be sutured in the labourer as well as in the musician or in those whose finger movements are concerned with delicate manipulations.

The extensor tendon might be cut in the specified area. You test for extension of the distal joint. The link ligament might extend it enough to fool you if you are not aware that the link ligament can almost do the trick when the proximal joint is extended. In such a case, flex the proximal joint just short of a right angle before testing the continuity of the extensor tendon. In this position the link ligament is relaxed and the lateral bands of extensor tendon are able to act. They are not able to act if the joint is flexed too much.

“The voice is Jacob’s voice, but the hands are the hands of Esau.” Nearly 4000 years ago (1760 B.C.) Isaac uttered these words as he examined Jacob’s hands and neck (he had Esau’s coat on) with his own hands. Isaac no doubt used his link ligaments in making his examination but it is quite unlikely that he knew anything about them.

#### SUMMARY

- (1) The link ligament passes from the distal phalanx, spanning the middle phalanx, and is attached to the side of the proximal phalanx. It runs dorsal to the axis of the distal joint and ventral to the axis of the proximal joint.
- (2) The link ligament does nothing when relaxed. When taut, the only way it can act on the distal finger joint is to extend it and the only way it can act on the proximal finger joint is to flex it.
- (3) Two actions make it taut:
  - (1) Flexion of the distal joint.
  - (2) Extension of the proximal joint.
- (4) Some surgical conditions of the finger were discussed in order to consider the part the link or retinacular ligament might play under such conditions.

In conclusion I would like to express my thanks to Dr. J. C. B. Grant,



professor of Anatomy at the University of Toronto for giving me permission to use the drawings from his book, Method of Anatomy.

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HIGH SERUM TRANSAMINASE ACTIVITY IN HEART DISEASE: Killop, T. and Payne, M.A. J. Circulation: 21: 646, (May) 1960.

The authors conclude that very high S.G.O.T. activity (greater than 500 units) in patients with heart disease, is at least in part caused by acute hepatic central necrosis. Acute circulatory changes may result in hepatic necrosis and increased blood enzyme activity without myocardial infarction.

L.C.S.

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THE USE OF INTERMITTENT POSITIVE PRESSURE BREATHING IN THE PREVENTION OF THE CARBON DIOXIDE NARCOSIS ASSOCIATED WITH OXYGEN THERAPY. Fraimow, W., Cathcart, R. T., and Goodman, E., Am. Rev. Resp. Dis. 81: 815, (June) 1960.

In this investigation, 35 patients were studied to evaluate the role of intermittent positive pressure breathing in preventing the increasing hypercapnea associated with 100 per cent oxygen breathing in emphysematous patients. The breathing of 100 per cent oxygen produced a decrease in ventilation accompanied by an increase in arterial pressure of carbon dioxide ( $p_{CO_2}$ ). When the 100 per cent oxygen was administered by intermittent positive pressure breathing, there was a marked increase in ventilation associated with a sharp reduction in  $p_{CO_2}$ . Thus the use of intermittent positive pressure breathing to administer 100 per cent oxygen prevented the rising hypercapnea usually found in these patients when 100 per cent oxygen was administered alone. In all but 2 patients, increasing hypercapnea was not only prevented by the use of intermittent positive pressure breathing, but that already present was reduced. The results obtained with intermittent positive pressure breathing were independent of its role as a vehicle for the administration of bronchodilators.

S.J.S.

## THE MEDICAL SUNDIAL\*

E. KIRK LYON, M.B., F.A.C.S.

Leamington, Ont.

A student of medical history would arrive at the conclusion that for the past forty years the shadow on the medical sundial has been stationary at ten minutes to twelve. Each succeeding decade has brought forth Presidents who warned all and sundry that the hour of government intervention in medical practice was imminent. The discourse thereafter varied somewhat.

There were those who exhorted the profession to don battle dress and sally forth to the fray. There were others who advocated that an effort be made to guide all the inevitable steps into familiar pathways, while still others seemed so overcome by fear or frustration that a great silence was thought appropriate.

In 1959 we witnessed the intervention of government in the field of hospitalization and the realm of medical practice of those closely associated with hospitals. What effect has this had on the shadow of the medical sundial? Has it pushed the shadow away from or closer to the zero hour of twelve o'clock?

Ten years ago the Council of the Canadian Medical Association, meeting in Saskatchewan, enunciated certain principles which it believed should guide our Association in dealing with problems facing us in those days. We expressed our belief in, among other things, the prepayment method of defraying the cost of illness. Since then a great deal of time and effort has been expended in implementing this principle on which we staked our future.

Although our experience in this field was limited at that time, we had made a start and had insured in medically sponsored plans about 8% of the population of Canada. The commercial insurance carriers had also insured a little over 8% of the population, so that altogether about 16% of the Canadian people had seen fit to protect themselves against the cost of illness by the prepayment method.

In the intervening years this type of insurance coverage has gained in popularity. We find today that our prepaid plans have now insured approximately 24% of the population, and, peculiarly, the commercial carriers have kept pace with us and have increased their enrolment to 24% of the population, so that we now have in Canada 48% of our total population covered by some type of health insurance. Stated in other words, we had covered in 1949, 2.2 million people, and in 1959, we had 8.2 million enrolled.

Although I have no figures for the commercial companies I think it is worthy of note that in 1959 our own medically sponsored or approved plans will have paid out to doctors for services rendered an estimated 70 million dollars.

These figures would indicate that the principle of prepaying the cost of illness has slowly but surely gained in popularity during the past decade. This principle has become particularly popular in the field of labour negotiations, and it is rare today to find a contract between labour and management which does not contain a "health benefit" clause. I come from a highly industrialized area where about 80% of the population is covered by our medically sponsored service plan, and I can categorically state that it has come to be

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\*An address by the Deputy to the President of the Canadian Medical Association, 1959-1960.



considered as an essential part of living in that area by both the public and profession alike.

In spite of this increase in popularity of the medically sponsored health insurance program in Canada, it has had a cool reception from some of the members of the medical profession. In fact, open hostility has at times been evident. One hears all too frequently that the medical profession should get out of the business of health insurance, that we should scrap the work of the past ten years, and leave the whole problem to the commercial insurance carriers, or to the government; that we as a profession should hold ourselves aloof from all financial arrangements for the payment of the cost of illness except that which may be arranged directly between the doctor and his patient; that we should in no way deal with "third parties."

To those members of our profession who believe this, I can only say that I know of no surer way of encouraging government intervention than to do as they suggest. Labour across this country has been clamouring for years for some type of government health insurance, and unless we as a profession can lead the way and supply the need, our politicians will be forced sooner or later to heed the demands of their constituents and supply for the Canadian people that which we deny them.

I believe we must explore further the field of co-operation between our own plans and the commercial insurance carriers. The interests of insurance companies parallel our own—the prepayment of medical care for the Canadian people.

I therefore submit that the medical profession must in self-defence support this program and do it honestly. These are our plans and should not be considered "third parties."

I am not so smug as to believe that our present system is perfect—far from it. There are many problems which require our constant study and improvement. We have not as yet been able to offer to all the Canadian people the benefits of prepaid medical care, but signs on the horizon are encouraging, with many of our plans now offering individual coverage.

Many of the concepts which we have held dear in the past are under attack, and it behooves us from time to time to examine their validity. We have heard much about the "fee-for-service principle." I am sure all of you within hearing would be horrified if I suggested this be abandoned. It is, however, open to question whether in all circumstances the fee-for-service principle can be defended as the *only* way we, as a profession, can be remunerated for our services. As an illustration let me remind you that under a fee-for-service principle, when related to our medical service plans where a standard fee is rigidly maintained, the doctor who is physically capable of performing the greatest *number* of services and not necessarily the *best* services is the one whose remuneration becomes the greatest. This system could carry with it *quantity* medical care and fail to remunerate adequately the careful, skilful practitioner rendering high-quality medical service to his patients.

Furthermore, it is highly doubtful that many of the new and complicated procedures, which require the team work of many highly trained individuals, can ever be paid for in any way other than on a unit basis.

In the future I would visualize a change in the system for remunerating our teachers of medicine. It is becoming increasingly difficult for our clinicians to devote half their time to teaching and make a decent living on a fee-for-service basis during the remainder of the day.



The fact that approximately 20-25% of the medical population of Canada today choose to earn their livelihood by other than a fee-for-service basis further strengthens the view that this principle, so long defended by our profession, may require further study in the future.

One could go on discussing such other things as doctor-patient relationship, freedom of choice, free enterprise—all principles on which we have built our heritage in Canadian medicine, and on which we must depend until something better is evolved. My only plea is that we keep an open and fertile mind; that we constantly study and improve, where improvement is indicated, in order that we may at all times work towards the goal which should always be before us—the provision of the best medical care for the Canadian people.

I would suggest to those of our profession charged with the operation of our prepaid medical care plans that they keep constantly in mind the high ideals which motivated those who initiated these plans. They must remember, when they are producing rules and regulations for the conduct of our affairs, that one of the prime objects of setting up prepaid medical care plans was to bring doctor and patient together so that we, as doctors, could not only better serve our patients but also obviate, if possible, encroachment of a government bureaucracy upon the practice of medicine. Let us not seek to avoid government bureaucracy by creating one of our own. The members of our profession who undertake these tasks must always be in the unenviable yet responsible position of serving well two masters, the subscriber who pays the bill and the doctor who renders the service. They must not allow our plans to become tight little insurance companies—money changers in the temple of Aesculapius!

A decade ago we thought that governments were deeply involved financially in health measures in our country when, in 1949, the federal and provincial governments of Canada spent 174 million dollars on health measures. In 1959 we find these same governments spending 552 million dollars in the health field, about three times what was spent ten years ago. (It is true that we must relate this to the national income, which has doubled in this same ten-year period.) He must be blind indeed who cannot see the trend in this regard which is occurring in Canada. Had a speaker in 1949 predicted this phenomenal rise in government expenditures in the health field, he would probably have been branded as a false prophet. However, I believe that these expenditures will increase still further as time goes on and the public demand that more and more of the benefits of health services be brought closer to their door by government assistance.

Although government in itself can never render the necessary medical care to the Canadian people independent of the co-operation of the medical profession, I am just as certain that the medical profession cannot render the necessary care without a large measure of government support.

Among our ranks there is some evidence of fear of government intervention. When we visited the World Medical Association in 1955 and the British Commonwealth Medical Conference in 1959, I was impressed, as was our General Secretary, by the fear and distrust of their governments expressed by many national associations. Fortunately to date we in Canada have not experienced the direct intervention of government in the personal liberty of the profession found in so many other countries. I would like to believe that this is due to the fact that the medical profession and government have been willing to sit down together and discuss medical economic problems. The medical profession must not dig in its heels but continue to stand ready to



consider all proposals genuinely designed to improve the health of the Canadian people. Our particular role should be to guide and direct government to the end that the best service we can provide is rendered to the public and, above all else, to preserve the dignity of our profession. I believe in the over-all picture that what is good for the people of Canada is good for the medical profession.

The development of universal hospital care insurance is so fresh in the minds of most of us that we as yet only dimly comprehend its obvious merits and possible complications. It is true that the hospital insurance plan has encroached to some mild degree on the private practice of medicine but we must, in all honesty, admit that government has interfered as little as possible with the private practitioner.

With the great upsurge of hospital construction which is taking place in Canada and the improvement of hospitals with government assistance, with the improvement in hospital staff organization directed by the Canadian Council on Hospital Accreditation, we are bringing to the community hospital a higher standard of hospital and medical care than ever before enjoyed in this country. While the improved community hospital can never be expected to bring to the small community all the benefits of our science, procedures which a decade ago were considered impossible are now commonplace and done with safety.

We must, however, realize that the passage of Bill 320 of the House of Commons of Canada with one stroke of the pen radically changed the business practices of hospitals across Canada. The hospitals of our country were at least partially prepared through their experience with Blue Cross and have experienced a minimum of disruption.

We have seen this year, for the first time in Canada, a political party in one of our provinces adopt as the main plank in their political platform a compulsory medical care insurance program for the people of their province. The fact that this political party has been returned to power, and is thereby committed to introduce a plan of medical care insurance, has given the medical profession of Canada grave concern. Signs on the horizon tell us that in at least one other province in Canada this same problem will become, in the very near future, a matter for the electorate. I ask you—are we prepared for these developments?

There was a time when we could hide behind the possible cost of such a program, but the present indications are that governments at all levels are becoming less fiscally responsible and the lack of money does not always act as a deterrent.

These increases in government spending in the health field may be considered by some as evidence of "creeping socialism" in our country, but I would remind you again that the improvements we have experienced have been effected in a very large measure by co-operation between government and the organized medical profession.

I cannot emphasize too strongly that we as doctors must put forth some effort ourselves and not leave everything to government. Remember: "Any government big enough to give you everything you want is big enough to take away everything you have."

There were in Canada in 1949 about 14,000 doctors. Today, our medical population stands at about 19,000. This increase has been brought about by graduation of medical students trained in Canadian medical schools and augmented by physicians educated abroad. In 1949 we had ten medical schools



in Canada; today we have twelve medical schools. I would call to your attention that the establishment of these new medical schools and the maintenance and improvement of the existing schools entail a great expenditure of public funds.

In Canada last year approximately 830 medical students were graduated from our medical schools. I am reliably informed that 1013 doctors last year presented themselves to the Royal College of Physicians and Surgeons of Canada for examinations of specialties in one field or another. One would query the advisability of training this large number of specialists and one would query also the number of these specialists who, of economic necessity, would find themselves doing general practice. Although I have the greatest sympathy and admiration for those dedicated doctors who devote a large part of their time to the training of our medical population, it would seem that some further assessment of this particular problem is urgently required. This study might determine the proportionate number of specialists to general practitioners required to best serve the Canadian people.

The rapid increase in medical groups and clinics composed largely of specialists would lead one to believe that perhaps in the future the pattern of practice may be radically changed and the solo practitioner will become the exception rather than the rule.

No matter what changes may take place in the training program on both the undergraduate and the graduate level, the Canadian medical profession must be adamant that nothing be allowed to hamper the clinical instruction of our students, and provision of clinical material must be assured. This is already presenting some problems in those provinces where universal hospital care is in force.

Now may I, as one whose service is becoming long in the practice of medicine and in the council of organized medicine, be permitted to pontificate a little.

One does not arrive at the position which I now have the honour to occupy without having some experience in the practice of medicine. It has, over the years, been a sobering experience and one which causes one to reflect on the long-term developments rather than on those things which seem expedient at the moment.

There are in our midst what are known as "the angry young men" of medicine. These young men are not peculiar to our profession but are found in all walks of life. Who are these angry young men of medicine? As the name implies, they are men who are young in their professional careers. They have gained their education and conducted their practice in the midst of a buoyant economy. In many cases they have known neither want nor privation. On the face of it one would think that of all people they have the least licence to be angry; rather, one would expect them to be smug, self-complacent and satisfied. I gain the impression, however, that they are angry because they realize that unless something is done, the natural cycle of events will change. It is as if they see in the distance something ominous that will destroy the very foundations of the things they have learned to cherish.

We who are older see the same signs but we have lived longer, we have practised under other conditions, and over the years we have had cause to wonder a little at the dogmatisms of oft-repeated beliefs. We are not as sure of some things as we were in our younger days. The black and white of youth has mellowed into a larger area of grey with a little of the distinctive colour



at the edges. We realize even without thinking about it that changes have come so gradually that they have disturbed us but little, which suits our desire for peace. Things are the way we have fashioned them, and even if we have not studied all the changes that have occurred, we have not the energy to go through the strenuous process of evolving new practices.

The "angry young men," on the other hand, have had nothing to do with the formation of the present policy. They examine it, not in the light of conditions which gave it birth, but only in the light of the present and their fears of the future. On this basis they find it inadequate and in saying so, sometimes before they have a suitable replacement, they are labelled "the angry young men."

Several years ago I could have identified myself with these angry young men, and I am not sure that those of us who had a part in enunciating our principles on health insurance ten years ago were not considered the "angry young men" of our day. So I say to these young men, continue your questioning of the problems of medicine, think about them, discuss them among yourselves, and with the older members of the profession; give the problems your careful scrutiny and, when you are sure you are right, have the courage to change those things which require change. Such actions constitute progress. Yours is a grave responsibility!

Now, what is our future? I am by nature an optimist. I have supreme faith in the days ahead. I have no patience with those faint hearts who would direct their sons and daughters to careers that are socially less useful and personally less rewarding than that which you and I have enjoyed as members of this, the greatest profession of all.

Ten years ago, when I had the honour to be president of my own Division, I stated in my presidential address certain beliefs which have remained unshaken. I can do no better than repeat them to you today.

"We must continue our search for better scientific methods."

"We must keep our professional and personal standards high."

"We must continue our study of medical economic problems."

"We must adopt a positive attitude."

"We must lead the way."

It is my belief that in this rapidly changing world the position which our profession has made for itself in society is not being challenged. The medical profession is assured of its place in the firmament. The challenge to us is to adapt our thinking to changing conditions so that we may help lead the Canadian people to that better and fuller life, the basis of which is fitness in mind and body.

The shadow on the medical sundial is at twelve o'clock!



## LETTER

To the Editor:

Two words of commendation have been stimulated in me by the article in the April issue of *The Nova Scotia Medical Bulletin* by Dr. D. F. Smith, and I would beg leave to speak them. I heard Dr. Smith give the paper to the Halifax Medical Society, and would have spoken to it then, but discussion was deferred to the end of the programme and I had to leave to attend another meeting.

When I first saw the programme for the scientific section of the New York meeting of the American Cancer Society, it was so wide in its scope—so general in nature—and differed so widely from their usual specialist type of meeting that I have attended, that it suggested itself as being an excellent programme for doctors in general practice. As the Nova Scotia Division of the Canadian Cancer Society has made a small sum available to us for travel purposes for the advance of cancer knowledge in this province, we were able to extend to the local chapter of the College of General Practice the privilege of sending a representative to that meeting. They seized the occasion and offered several names. Dr. Smith went, the sole condition being that he bring back to his colleagues in this province his findings and impressions. No one will now deny that the selection was a good one or that the wisdom of it is reflected in Dr. Smith's report and in its worthiness to be included in the *Bulletin*.

Under advice and under other auspices, I too attended the New York meeting, and as I heard Dr. Smith's paper, I was much impressed by the faithfulness of the report and by the skill with which he reproduced the essentials of a meeting of a great many papers without undue sketchiness.

Scientific meetings such as that presupposes that doctors have need to assess their attitude towards cancer from time to time and to so refresh themselves. The large attendance there supports that view, and suggests too that among those there, complacency was not one of their weaknesses. Sometimes we are brought to wonder whether isolated to the degree that we are here from such stimulating discussions we tend to manifest that defect. Occasion for such rumination is supplied by such events as the following:

Within the last few days the head of one of our larger clinical departments, while discussing statistics with me, spoke about a depressing finding in his special department. He was concerned because the percentage figure for early cases coming for treatment, that is to say, the proportion of early cases to advanced ones, which ought to be going up from year to year in this clinic as it is doing in other parts of the world, *is in Nova Scotia virtually at a standstill*. He expressed the view that many more patients have become more conscious of the possible significance of signs and symptoms and are reporting them earlier and that is, of course, a favourable factor; but he seriously suggested that that was offset by the unfavourable one of absence of a corresponding alertness in ourselves as the doctors to whom such signs and symptoms are reported. Is this due to complacency?

Dr. Smith's paper makes no attempt to cover all our obligations in relation to this subject but it does indicate some of them. It does, however, very clearly point up again the great importance of the doctor's office as our first line of defence in the control of Cancer.

I have personal knowledge of the interest of the College of General Practice at the national level in this subject. It is shown by its expressed desire to



include a speaker on cancer at each of its scientific meetings. I am happy to have shared in the decision of the national board of the Cancer Society which facilitated the action. It is natural to expect then that the local chapter of the College, which of course helps to make national policy, would show similar interest and again I am happy to have been a small factor in providing opportunity for them to display it.

It is to be hoped that where there is still so much to be done in this province, we shall avail ourselves of many opportunities to show how important cooperation is, as we shoulder "the white man's burden" in this respect.

Yours sincerely,

NORMAN H. GOSSE, M.D.

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### BOOK REVIEW

SYNOPSIS OF PATHOLOGY, 5th Ed. Anderson, W. A. D. The C. V. Mosby Co., St. Louis, 1960 876 pp., \$9.25.

The appearance of a fifth edition of this book testifies to its continuing popularity and its wide acceptance. The fourth edition was published in 1957 and rapid advances in our knowledge of disease and the discovery of several new entities have called for a new edition within the period of three years.

The author's objective is "a concise but comprehensive presentation of pathology" with emphasis on the basic aspects of disease processes. In order to be comprehensive and yet remain within the physical limits of a single volume, the writer must use the outline form in some places. However, he succeeds in his purpose of presenting an inclusive survey and avoids the telegraphic style which may be found in some outlines. Where it is required, space is used for the purpose of general discussion. New syndromes and diseases that are presented include pulmonary alveolar proteinosis, Dubin's disease, aldosteronism and the carcinoid syndrome. New concepts of pathogenesis are introduced, as in the discussion of thyroiditis and there is recognition of the increasing importance of exfoliative cytology.

The illustrations are generally of high quality. Some of the gross photographs are taken at slight magnification and provide a clear picture of subtle changes that might not be apparent without the use of this technique. The photomicrographs, with a few exceptions are clear and illustrate well the process under discussion. The magnification is not always given and in some cases there is need for a longer caption to point out the features illustrated. References are appended at the end of the text in a separate section. They have been carefully selected and for the most part are review articles and comprehensive papers that can provide a starting place for a critical search of the literature.

The book is well printed and attractive and can be easily held for reading. It will be useful for those who need a ready source of information but do not want a large reference text. This work has almost outgrown the designation of synopsis but it can be recommended to those who seek a well organized survey of pathology in a convenient sized volume.

C.D.C.

## PERSONAL INTEREST NOTES

### CAPE BRETON MEDICAL SOCIETY

A special meeting of the Cape Breton Medical Society was held at St. Rita's Hospital in Sydney on September 27, 1960 for the purpose of hearing Dr. Hugh C. G. MacGuire of Montgomery, Alabama, U.S.A.

Dr. MacGuire gave a very interesting talk on Automedics with special reference to a new method for hospital construction—small compact hospital units built at a lower cost operated efficiently and embodying all the latest designs for the medical care of the future. A descriptive article on this subject is contained in the June, 1960 issue of *Modern Hospital*.

The regular meeting of the Cape Breton Medical Society was held at the Glace Bay General Hospital on October 4th, 1960. Out of town guests included Dr. F. J. Granville, President, Nova Scotia Medical Society; Dr. C. J. W. Beckwith, Executive Secretary, Dr. T. M. Gorman, Antigonish, and Dr. J. Earle Hiltz, Medical Superintendent, Nova Scotia Sanatorium, Kentville.

Dr. J. Watson Sodero, Sydney, has recently returned from Western Canada where he attended a sectional meeting of the American College of Surgeons.

### HALIFAX MEDICAL SOCIETY

October 5, 1960—A special meeting of the society was held at the Dalhousie Public Health Clinic to hear the report of the special committee on hospital bed requirements. The work of this committee which was reported in the Personal Interest Notes of the September issue of *The Nova Scotia Medical Bulletin*, had apparently not been in vain. It was recently announced by the Minister of Health, Hon. R. A. Donahue, that two floors would be added to the planned enlargement to the Victoria General Hospital to make a total capacity of 973 beds (an increase of 120). Dr. F. J. Barton gave a report on the special executive meeting of The Nova Scotia Medical Society. The C.M.A. statement on "Medical Services Insurance" was reviewed at some length. Mimeographed copies of the "new look" at the Nova Scotia Medical Society by Dr. T. W. Gorman were distributed. It was decided that, until further notice, future meetings of the Society would be devoted entirely to business matters. Dr. W. A. Hewat, Lunenburg, past president of the Medical Society of Nova Scotia attended.

October 12, 1960—The semi-annual dinner of the Halifax Medical Society was very well attended. A scroll for "meritorious attainments in the practice and teaching of medicine and surgery" and an honorary membership were conferred upon Dr. Cecil E. Kinley. The after dinner speaker, Dr. Norman H. Gosse, a delegate to the recent World Medical Association Meeting in Berlin, painted a fascinating word picture of his travels through Europe including Austria, Russia, and parts of Scandinavia. His ability as a speaker is matched by his ability to gain so much from his travels.

Dr. Lieselotte Brown (Mrs. Holland) has returned to the staff of the Nova Scotia Hospital, Dartmouth, after practicing psychiatry in Kingston, Ontario for the past year.

Dr. Myer Mendelson (Dalhousie Class of '50) recently published a monograph on depressions, entitled, "Psychoanalytic Concepts of Depressions."

September 4-5, 1960—Halifax Gun Club: the Maritime Trap and Skeet Shoot Championships involved a number of medical names, recorded below:



1. Dr. D. R. McInnis, Shubenacadie, Maritime 20 gauge Individual Skeet Champion; Class B winner Maritime Individual Trap Champion; and (with Willard Hines) Class B. Crown, two Man Trap Team Championship.
  2. Dr. A. Ormiston, Sydney, C. Trap Individual Champion, and (with H. D. McCurdy) Class C Two Man Trap Championship.
  3. Dr. David McCurdy, Sydney, was a member of the 5-man Team Trap Champions.
  4. Dr. Les Stewart, Halifax, was a member of the 5-man team of Handicap all gauge Skeet champions.
- Dr. J. K. Sullivan, St. John, N. B. and Dr. Forbes MacLeod, Lancaster, N. B., also were winners of various championships.

#### VALLEY MEDICAL SOCIETY

Recently opened by Health Minister, R. A. Donahue, at the Nova Scotia Sanatorium, Kentville was a new three-floor brick structure adjoining the east Infirmary, to be known as Miller Hall, in honor of the first Medical Superintendent of the Sanatorium (1910-1947), Dr. A. Frederick Miller, who came to Kentville some 50 years ago.

#### NOVA SCOTIA DIVISION OF THE CANADIAN ANAESTHETISTS SOCIETY

The Nova Scotia Division of the Canadian Anaesthetists Society was fortunate in persuading Dr. A. J. W. Beard, of the Postgraduate School of Medicine, England to address a recent meeting of the Society held on September 26, at the Victoria General Hospital. In addition to a thought-provoking lecture on open-heart surgery at this meeting, Dr. Beard also lectured to the Residents and clinical years of the medical student body on the Natural History of Mitral Stenosis, a programme arranged by the Post Graduate Division of the Faculty of Medicine. Dr. and Mrs. Beard were the guests of Dr. C. H. Baker, Chairman of the Nova Scotia Division of the C.A.S. at his country cottage at Mason's Point, and also enjoyed an excellent afternoon's sailing as a guest of Dr. Gordon Mack aboard the yacht "Hebridee" during the weekend of their visit.

#### NOVA SCOTIA ASSOCIATION OF PATHOLOGISTS

The International Society of Clinical Pathologists meeting in Madrid, Spain last June was attended by Drs. Ian Maxwell, Dalhousie University and Dr. James Gray, Halifax Infirmary.

Dr. Herbert Laing, Winnipeg, has been appointed Associate Pathologist at the Halifax Infirmary.

#### UNIVERSITY

A Federal Government plan to establish a Canadian Medical Research Council has been announced. It is intended that the Council will be a committee of medical people not under direct control of government departments. This was recommended after a two year study of medical research in Canada by a committee of medical educators, chaired by Dr. R. F. Farquharson, Toronto, and having as one of its members Dr. C. B. Stewart, Dean of the Faculty of Medicine, Dalhousie.

## BIRTHS

Dr. and Mrs. J. R. Armstrong (nee Joanne Stairs) a son, Toronto Western Hospital, September 14, 1960.

Dr. and Mrs. M. E. DeLory, a daughter, Annapolis General Hospital, September 19, 1960.

Dr. and Mrs. R. D. Drysdale, a son, Douglas Ray, at Prince Edward Island Hospital, October 6, 1960. A brother for Anne, Janet and Sandra.

Dr. and Mrs. D. Robert Patton (nee Catherine Paterson), a son, Halifax Infirmary, September 23, 1960.

Dr. and Mrs. D. E. Forbes, a daughter, Donna Mae, North Surrey, B. C. August 12, 1960.

Dr. and Mrs. D. B. Keddy, a daughter, Jill, at Fisherman's Memorial Hospital, Lunenburg, October 1, 1960.

Dr. and Mrs. Adrian MacKenzie, Halifax, a daughter, July 15, 1960.

Dr. and Mrs. Robert Parkin, a son, Todd Robert, October 5, 1960.

Dr. and Mrs. Sherman Zinek (nee Shirley Tanner) a son, Christopher Sherman, Grace Maternity Hospital, October 3, 1960.

## CONGRATULATIONS

To Dr. Denis R. S. Howell, Halifax, on his election to the directorate of the Canadian Association for Retarded Children, at the annual conference in Montreal, in September. He is also president of the Nova Scotia Association. The 1962 Retarded Children's Conference for Canada will be held at Halifax.

## COMING MEETINGS

November 30-December 3, 1960—Joint Annual Meeting of the Canadian Heart Association and National Heart Foundation of Canada, Royal York Hotel, Toronto, Ontario.

January 19-21, 1961—The Royal College of Physicians and Surgeons, Annual Meeting, Ottawa, Ontario.

January 22-25, 1961—The Canadian Association of Radiologists, Annual Meeting, St. John, N. B.

March 20-23, 1961—College of General Practice, (Medicine) of Canada, Vancouver, B. C.

March, 1961—Nova Scotia Division, College of General Practice, business meetings with social activities. Further details will appear in a later issue.

June 19-23, 1961—Canadian Medical Association, 94th Annual Meeting, Montreal, Quebec.

## OBITUARY

Dr. John J. MacRitchie, of Halifax and Englishtown, Victoria County, died at the Victoria General Hospital, Halifax on September 26, 1960.



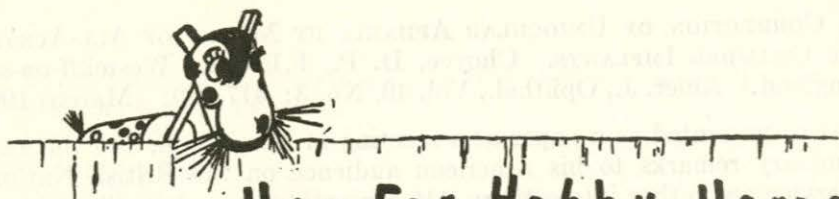
THE CORRECTION OF UNIOCLAR APHAKIA BY MEANS OF ALL-ACRYLIC ANTERIOR CHAMBER IMPLANTS. Choyce, D. P., F.R.C.S. Westcliff-on-sea, Essex, England. *Amer. J., Ophthalm.*, Vol. 49, No. 3: 417-439: (March) 1960.

This was presented as a paper at a meeting in Mississippi, and the author's preliminary remarks to his American audience on the British National Health Service are rather interesting: "It has created an administrative machine so top heavy that it is in the process of slowly but surely crushing the life out of our medical profession. By this I mean that by the time a maximum part-time consultant, like myself, has dealt with his administrative and clinical chores, he has neither the time nor the energy left for any constructive thinking or research projects."

First, an intraocular implant is preferable where only one eye is aphakic, either because of trauma or surgery, and it is desired that the patient return to the use of binocular vision. It may be pointed out that this is impossible with ordinary spectacles or in most cases, even with contact lenses. There are several types of intraocular implants; first, the posterior chamber lenses (Ridley) which can only be used at the time of a perfect extra-capsular extraction, and cannot be inserted if the posterior capsule is defective or if there are any adhesions between iris and posterior lens capsule. Second, anterior chamber implants (i.e., anterior to the iris) were first described by Strampelli of Rome, whose first type of implant was a central optical lens supported by a rectangular shaped portion meant to fit in various parts of the anterior chamber angle so as to insure a rigid fit within the eye. The two principal complications which arose were, damage to the posterior surface of the cornea and iridocyclitis leading to secondary glaucoma. The plastic support portion of the anterior chamber implant has been changed experimentally to nylon or tantulum loops, both of which also tend to irritate the eye over long periods. It was felt that a one piece all-acrylic implant was probably the safest to use. The method of sterilization by immersion in one-percent Cetavlon/Cetrimide was often followed by absorption of this material by the plastic implant, subsequently leaking into the eye and causing irritation; therefore, an alternative method was developed which meant the lens was to be immersed in 10 percent sodium hydroxide and stored in this solution, to be removed by washing in saline at the time of operation. Various surgical considerations are then gone into in some detail: such as pre-operative choice and management of patients, the actual technique of operation and of insertion of the lens, and post-operative care, including prophylactic broad spectrum antibiotics. Post-operative complications: immediate (within one week of surgery), early (from one week to three months), and late (from three months to three years) are described in detail. In the author's series of one hundred and eleven cases, he achieved a final visual result of 20/30 or better in some 60% of his patients, and full binocular function (where tests could be undertaken) in 75%. It is also pointed out that there is a striking improvement from a psychological point of view.

(Editor's Note: Another type of anterior chamber implant presently undergoing investigation is a so-called "iris clip lens" which by means of spring clips is attached to the pupillary border of the iris).





## Hay For Hobby Horses

WHEN DOCTORS DIFFER

In the editorial, Antibiotics in Fixed Combination, which was reprinted in the last issue of the Bulletin, the following statement appears, "that extensive use of the fixed combinations of antibiotics (has had a role) in bringing about the present state of affairs (the increased prevalence and seriousness of resistant strains) is little realized by the medical profession, which, because of its continued prescription of these combinations, must take the ultimate responsibility and blame." This situation has troubled me for some time and a series of incidents in my practice has heightened my sense of perturbation. Recently, I examined a sixteen year old college entrant with a florid upper respiratory infection. After my examination I advised her to take to her bed and stop spreading the infection among her classmates. "Oh," she said airily, "my father's a doctor and nothing stops my colds but a shot of penicillin." Last week I had occasion to object when an intern administered a penicillin-streptomycin combination to one of my patients because "he had a fever, therefore he has an infection and he needs treatment." This young physician had just come from a surgical service and he said, in defence of his position, that this type of "expectant therapy" was widely used there. I summarized for him the expert opinion of Finland, Kirby, Jawetz and others and closed by saying that among the students of antibiotic therapy the use of fixed combinations, especially in blind therapy, was a sign that the physician involved hadn't read anything in this field since 1955.

Last week I went out of town and left my patients in the hands of my young friend Martin Stark. One of them, Bill Clegg, has had known Hodgkin's disease for several years and had come in for review the day before I left. His lymphomatous disease was under control as measured by his hemoglobin and physical examination but he looked dreadful. In addition, for the first time in many years, this stoic longshoreman was complaining. He had lost 15 pounds in less than two months and his cough, which had improved when he had stopped smoking after a bout of bronchial pneumonia last spring, had now returned and he was producing five or six cupfuls of dark sputum daily. As Bill had been on steroids for 18 months, pulmonary tuberculosis was a strong possibility. He was a chronic bronchitic and the increase in his sputum raised the possibility of bronchiectasis. I recommended bronchoscopy to start after a period of postural drainage. Finally, at his age, with his smoking habits and a history of recurrent pneumonia, epidermoid carcinoma was a grim possibility.

As I was leaving, I suggested to Stark that he have one of the other men see Clegg to speed up the process of differential diagnosis. On my return he reported that Harry Blaze, one of my colleagues had seen old Bill; said that probably he did not have tuberculosis or bronchiectasis; shot one specimen of sputum off to the lab and ordered 1 million units of crystalline penicillin every



four hours. Of course, my friend felt obliged to go along with Blaze particularly since I had suggested the consultation. I didn't have any right to object but from the point of view of rational investigation and therapy I would like to ask Dr. Blaze a few questions.

1. You do not believe that Bill Clegg has tuberculosis or bronchiectasis. How do you propose to find out what he *does* have?
2. If the single specimen of sputum comes back negative or with respiratory flora only, what do you do then?
3. My patient has a hemoglobin of 10.5 gms., a temperature of 99.4 and had tolerated his disease for over three months. Why the rush to get him on an antibiotic? How can you be sure that he has a condition that will be benefitted by penicillin, especially in view of the fact that he is particularly vulnerable to resistant infections because of previous multiple hospital admissions and his long period on steroid therapy.

Anyone who sees a good deal of chronic illness or malignant disease will agree that these conditions, complicated by superadded infection, are difficult enough to treat without embarking on some therapy "blind." I put it to young Stark that, in special instances such as fulminating septicemia especially that accompanied by haemorrhagic phenomena, he would have to choose an antibiotic on probabilities alone. In such circumstances, the patient cannot tolerate his disease long enough for you to collect the evidence and get a definite bacteriological diagnosis. Even under these circumstances, he should get multiple cultures or other specimens before antibiotic therapy was begun. The most harrowing experiences I have had in leukemia or lymphomata complicated by septicemia, have been in those cases where I was committed to action blindly. But why does an experienced physician, without any indications that would force his hand, parachute into the darkness of mixed pulmonary pathology apparently by choice and preference? In this instance he has had the effect of leading a young physician down the same garden path.

I am not surprised that there are conflicting opinions about details of medical therapeutics, and such conflicts bother me not a bit if I can see a reasonable amount of evidence on both sides. What gripes my professional bowels is that those who teach what I consider bad medicine need have nothing but whim and an insistence on the individual's right to do what he damn well pleases, to nullify the opinion and practice of the experts.

Now to return to the excellent editorial I cited at the beginning of this harangue. What is the physician-apprentice or the informed lay person to think when he is confronted with this spectacle? Expert opinion in our profession has firmly condemned therapy with antibiotics in fixed combinations over a period of years. Despite this, drug companies are encouraged to produce more and more of these elegant frauds because the demand among practicing physicians continues unabated. I have recently examined documented evidence on the methods used to promote these antibiotics combinations and it is nothing but pure chicanery. An experienced observer outside the profession, who knows the alliance of advertising and drug-making intimately, said to me recently, over an excellent steak, "They think you (the practising physicians) are a bunch of boobies. They hold you in contempt." I couldn't argue with him. We seem to love to be cuckolded and I will show later that we even spring to the defence of those who are debauching us.

This is the question: The example of the physician in health matters carries immense weight with the general public and his patients in particular. When our opinions or actions are likely to influence the health of others, do

we not have the responsibility of giving the best knowledge available on the question at hand? This sense of responsibility among physicians for the effect of their words and example is vital where the prevention of disease waits upon control of dangerous personal habits. To date we, as a profession, have not given effective leadership in the campaigns to control the abuse of antibiotics. It is inescapable, to me, that no one can provide this leadership except the individual practicing physician. As long as we insist on straddling the fence in the controversial issues further progress will be difficult or impossible. If we do not have any such responsibility, my complaints in these matters are unfounded. I leave it to you, gentle reader, to judge.

Yours, once again, for rational therapy,

BROTHER TIMOTHY



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**INFECTIOUS DISEASES—NOVA SCOTIA**  
Reported Summary for the Month of August, 1960

Diseases	NOVA SCOTIA				CANADA	
	1960		1959		1960	1959
	C	D	C	D	C	C
Brucellosis (Undulant fever) (044)	0	0	0	0	24	11
Diarrhoea of newborn, epidemic (764)	0	0	0	0	5	13
Diphtheria (055)	0	0	0	0	1	0
Dysentery:						
(a) Amoebic (046)	0	0	0	0	0	0
(b) Bacillary (045)	0	0	0	0	134	124
(c) Unspecified (048)	3	0	0	0	66	13
Encephalitis, infectious (082.0)	0	0	0	0	13	12
Food Poisoning:						
(a) Staphylococcus intoxication (049.0)	1	0	3	0	60	0
(b) Salmonella infections (042.1)	55	0	13	0	55	0
(c) Unspecified (049.2)	3	0	0	0	5	134
Hepatitis, infectious (including serum hepatitis) (092, N998.5)	64	0	0	0	298	241
Meningitis, viral or aseptic (080.2, 082.1)						
(a) due to polio virus	0	0	0	0	109	0
(b) due to Coxsackie virus	0	0	0	0	0	0
(c) due to ECHO virus	0	0	0	0	0	0
(d) other and unspecified	0	0	5	0	0	171
Meningococcal infections (057)	0	0	5	0	9	14
Pemphigus neonatorum (impetigo of the newborn) (766)	0	0	0	0	0	0
Pertussis (Whooping Cough) (056)	19	0	1	0	357	586
Poliomyelitis, paralytic (080.0, 080.1)	0	0	1	0	135	429
Scarlet Fever & Streptococcal Sore Throat (050, 051)	223	0	102	0	517	490
Tuberculosis						
(a) Pulmonary (001, 002)	0	0	23	1	322	420
(b) Other and unspecified (003-019)	0	0	4	0	0	108
Typhoid and Paratyphoid Fever (040, 041)	0	0	1	0	16	21
Veneral diseases						
(a) Gonorrhoea —						
Ophthalmia neonatorum (033)	35	0	0	0	1302	0
All other forms (030-032, 034)	0	0	51	0	0	1512
(b) Syphilis —						
Acquired—primary (021.0, 021.1)	3	0	0	0	173	0
— secondary (021.2, 021.3)	0	0	1	0	0	0
— latent (028)	0	0	0	0	0	0
— tertiary — cardiovascular (023)	0	0	0	0	0	0
— „ — neurosyphilis (024, 026)	0	1	0	0	0	0
— „ — other (027)	0	0	0	0	0	0
Prenatal—congenital (020)	0	1	0	0	0	0
Other and unspecified (029)	0	0	0	0	0	182*
(c) Chancroid (036)	0	0	0	0	0	0
(d) Granuloma inguinale (038)	0	0	0	0	0	0
(e) Lymphogranuloma venereum (037)	0	0	0	0	0	0
Rare Diseases:						
Anthrax (062)	0	0	0	0	0	0
Botulism (049.1)	0	0	0	0	3	0
Cholera (043)	0	0	0	0	0	0
Leprosy (060)	0	0	0	0	1	0
Malaria (110-117)	0	0	0	0	0	0
Plague (058)	0	0	0	0	0	0
Psittacosis & ornithosis (096.2)	0	0	0	0	0	0
Rabies in Man (094)	0	0	0	0	0	0
Relapsing fever, louse-borne (071.0)	0	0	0	0	0	0
Rickettsial infections:						
(a) Typhus, louse-borne (100)	0	0	0	0	0	0
(b) Rocky Mountain spotted fever (104 part)	0	0	0	0	0	0
(c) Q-Fever (108 part)	0	0	0	0	0	0
(d) Other & unspecified (101-108)	0	0	0	0	0	0
Smallpox (084)	0	0	0	0	0	0
Tetanus (061)	0	0	0	0	2	0
Trichinosis (128)	0	0	0	0	7	0
Tularaemia (059)	0	0	0	0	0	0
Yellow Fever (091)	0	0	0	0	0	0

C — Cases    D — Deaths

\*Not broken down