e Problem of Spontaneous Abortion

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ABORTION is the most frequent occurrence in the gynaecological ward of the Victoria General Hospital, and when we realize that each abortion means the loss of a potential citizen its seriousness becomes evident.

About five years ago the gynaecological staff became concerned about this and decided to investigate the total problem of spontaneous abortion, the frequency of premature interruption of pregnancy, the different aetiological hypotheses, research literature on the subject, treatment methods applied to this condition and the results obtained. A study of the literature revealed that other centres reported approximately the same percentage of foetal loss due to abortion as we did — about ten per cent. The causes given in the literature were numerous and the methods of treatment varied.

It was decided that an investigation, under the direction of the Gynaecological Department, be started in an attempt to clear up some of the confusion concerning causes and treatment, and to bring to light new facts. It was felt that this investigation should be as broad as practicable and that a multidisciplinary study uniting specialists in the fields of gynaecology, endocrinology, biochemistry, psychiatry and pathology would be the best approach. With this in mind a group of specialists in these fields was organized. This project has been carried out since 1952, under a Federal Health Grant.

Method of Approach

At first every case of threatened and habitual abortion admitted to the Victoria General Hospital was investigated. Following a very detailed history the gynaecologist did a complete physical and gynaecological examination. A dietary questionaire was filled out. Blood was taken for determination of Vitamin C and E cholesterol, calcium, N. P. N., as well as haemoglobin and Rh grouping. At least two 24-hour urine collections were assayed for hormone levels. A psychiatrist interviewed the patient and a psychologist submitted her to a battery of tests. All tissue passed in abortion or the placenta at term was preserved for pathological study. In all, 135 cases were studied in this way, a few patients being studied in two or more pregnancies. Several patients were studied on a long-term basis, making 48-hour urine collections at home every week and seeing the psychiatrist for weekly interviews of one hour.

Concurrently a similar study was made of normal pregnancies, as a control series.

To date our findings are as follows:

(1) Those who abort show no greater deficiency as regards diet than do those who carry on to term.

(2) There is no difference in the Vitamin C or Vitamin E estimations between the women who abort and those who carry to term.

(3) The hormone levels are low in threatened abortion, yet many women with obviously normal and high levels abort, and some with low carry on to term.

(4) Using the serum cholesterol estimations we are unable to say that thyroid deficiency plays any part in the abortions studied.

(5) Structural uterine defects studied by means of hysterograms played no part in the abortuses studied.

(6) Some form of acute physical or emotional stress could be elicited in practically all cases studied, yet were no more frequent in our aborting women than in our normal controls. It is possible that they may act as a trigger mechanism in an unstable situation.

(7) Certain degenerative changes have been found in the placentae of abortuses which are not found in the placentae of normal pregnancies. These changes have been interpreted as an increased collagen formation in the villi and could conceivably be of an allergic nature.

Much of the above information came from the study of women who had already threatened to abort without regard to previous history. We would now like to extend our investigations to include long term study of habitual aborters, preferably beginning our study before pregnancy or shortly after conception. These women would be investigated in the same manner as above mentioned, but would also be followed at weekly intervals with hormone studies and psychiatric interviews. Some of this work has already been done, and we are impressed by the fluctuations in the hormone levels corresponding to the alternating emotional states of the patient. Two of our cases fall into the above category, and I would briefly summarize the history of one of these. A young woman with a history of seven abortions and no children came to us early in our study. She was investigated as described and followed weekly. Her emotional state was reflected in her hormone levels. At several points during the pregnancy threatening abortion coincided with emotional stress and low hormone levels. Reassurance and psychiatric support by one of the co-authors was followed by an obvious rise in the levels and disappearance of symptoms. She had her baby and is now pregnant again, near term.

We do not as yet know the answer to the complex problem of spontaneous abortion. There appears to be no one cause, but a multiplicity of causes. More work and study is needed. In order to do this we need to see and study on a long term basis women who have lost three or more pregnancies. We believe that we can help many of these women to go to term pregnancy and at the same time arrive at some clues to the solution of this very important problem.

Every practitioner in Nova Scotia sees women who have lost three or more consecutive pregnancies. Some of these women may be very anxious to get a live baby. Our group would be happy to co-operate if the doctor would acquaint these women with the work being done, and if they agree, make arrangements for them to come in to the Victoria General Hospital for the above investigation. This would mean approximately two days in hospital for the preliminary investigation. Then they would be followed every two weeks by one of the group. This last would mean bringing in 48-hour collections of urine and having a short interview with the psychiatrist. Should complications arise, it might mean that they would have to be seen oftener, but as a rule we do not find this necessary.

Should any doctor be interested in the above, please write or contact the Director of the Abortion Research Project, Department of Gynaecology, Room 543, Victoria General Hospital, Halifax, N. S.

Sigmund Freud

1856 - 1939

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A hundred years ago one of the most contentious figures of the nineteenth century was born in Frieburg, Austria. Until his death in 1939, a steady series of writings emerged into the medical world, and then gradually these ideas began influencing almost every area of human achievement. At first bitterly resented by his colleagues, especially those in his adopted home city of Vienna, Freud gradually built about himself a group of brilliant people from many disciplines and his influence spread throughout the Western world, and now is strongest in the North American continent.

As long as he continued his investigations on embryology, anatomy and drugs, Freud was accepted But in the early 1880's, after being profoundly influenced by a period of study under the great French neurologist and hypnotist Charcot, he returned to Vienna to become very interested in the treatment of a case of hysteria reported to him by Dr. Joseph Breuer. "Anna O.", as this first case was called, plus the knowledge he had gained in France, led Freud to investigate in more detail the treatment of hysteria, and from this he naturally went on to treatment and investigation of other neuroses.

As he went deeper into the meaning of his patients' symptoms by means of hypnosis and a special technique which he called "free association," he encountered more and more material which even in easy-living Vienna was considered immoral. i.e. a great deal of disturbance in the sexual sphere. Soon he and Breuer parted company probably due to embarrassment to Breuer who was a very popular family doctor) and Freud went on alone One of the great characteristics about Freud was his willingness to go on alone, his "splendid isolation" as he called it, and though at times he would head large groups of students, until his death he was basically alone and never sought approval.

Seeing patients all day, and studying his notes and writing most nights, he amassed a great deal of clinical data and, to the best of his ability, went exhaustively into the origin of the psychiatric illnesses among his patients. He was primarily a researcher, going into the depths of his patients' unconsciousness to find *cause*. He always attempted to be scientific. Never satisfied with the obvious, he was always attempting to go back to the origins. At times he changed his mind as new information and insight came to him. He never became static nor rigid in his thinking, but did not appreciate it when some of his brilliant students would bring out their own aspects of psychiatric illness, which Freud frequently dismissed as superficial.

By far his greatest influence has been in the field of psychiatry, and most of his writings still remain classics, and, though later knowledge has tended to modify some of his conclusions, his formulations on most of the neuroses still remain basically unchanged.

To understand his steps forward, historically it must be remembered that mental diseases in his time were poorly understood and poorly treated. Other investigators had brought out certain concepts, e. g. classifications had come

out in the psychoses, but they were on a very descriptive level. A few investigators, especially Janet, had worked on the hysterical neuroses, and were struck with the great significance of suggestion in the onset and type of symptoms, but even the great master Charcot considered that hysteria was a neurological disease. ("A congenital degeneration").

It should be emphasized that Freud came to his conclusions from work with his patients. He used their productions in the psychiatric treatment interviews and did not attempt to force his theories on his patients nor force his patients into categories. He listened, and he wrote, and he pondered the significance of what he wrote. Though he was not the first to use dreams, he wrote most brilliantly about them, and gradually he came to the conclusion that *all* the patients' productions had inner significance to the patient, and often contributed to the onset of psychic disorder, and by understanding them the patient could be helped.

A brilliant mind, he still scorned to take shortcuts, and one of the difficulties in reading his original productions are the long, involved Germanic sentences that reason towards a conclusion.

It was many years before Freud's findings were accepted even in psychiatry and the antagonism towards his idea still goes on in many quarters. But to the general field of psychiatry he brought the idea of *dynamics*. That is, even the most bizarre symptom has significance to the patient and can be understood when the patient's experiences are understood. It is this whole aspect of dynamic psychiatry that lifted this isolated branch of medicine, which was really not recognized as a specialty, from the fields of custodial care and descriptive categorization of mentally ill patients in asylums to the general acceptance of psychiatry in all branches of medicine, in the universities, in the hospitals, in industry, in the school and in the homes.

Another thing that makes it hard to follow Freud in his original writings is his somewhat mechanistic approach (which historically must be remembered as the means of description of his times) and in retrospect, his somewhat unfortunate choice of words that are emotionally disturbing has kept away many from accepting his amazing discoveries. It is for this latter reason that many people in reading Freud, and especially taking his statements out of context will find his comments on "infantile sexuality" disgusting and shocking, but it must be remembered that Freud never avoided an argument and in his "isolation" continued on what he considered was the correct path, no matter what the public or professional reaction was.

Dynamic psychiatry is not only psychoanalysis, but also a total approach to medicine, and it is in the increasing interest in the psychosomatic disorders that many Freudian explanations seem to be of help in understanding the production and form of symptoms. The expression of conflict by means of physical symptoms has been recognized for years in hysteria, but in the long chronic expression of resentment and insecurity, many of the psychosomatic complaints now can be recognized, treated, and even prevented.

As Freud worked with his patients, he found that many of their disturbed feelings went back to their childhood, and he exploded once and for all the illusion that childhood was happy and carefree. In his patients, he was able to go past the so-called "infantile amnesia" and many of his patients could go back

to very early happenings and express the feelings that were disturbed at that time. It was a natural sequel then to think of preventing neurosis or instituting treatment with children, and most child guidance clinics throughout the world, even though they don't use Freud's words use many of his concepts in treatment and prevention. This has gone further. Many of Freud's ideas are now well-recognized in child-rearing practices, and although some authors have taken them to absurd lengths, most parents now recognize that children have rights, that they are individuals, that they have their own unique personalities and feelings, and that early training habits must be aimed towards strengthening and not just subduing the child.

Freud's ideas have also become of great significance in education and his general principles are well recognized in most teacher colleges throughout North America.

For many years, novelists and writers have intuitively written about many of the things that Freud found in his patients. e.g. one of my teachers has always recommended to training psychiatrists that they read Shakespeare in detail. It is obvious that Hollywood and TV. have gone too far with their use of Freudian interpretations and Freud would have been the first to protest, but the general acceptance of many of the modern writings by the general public would indicate that there is more than a kernel of truth in the Freudian ideas on human development.

Freud never attempted to establish a "school". The establishment of "Freudian Psychoanalysis" was not his idea, and it has become increasingly obvious in the last two decades, that the greatest future for Freud's ideas lies in the general field of psychiatry and holistic medicine. This future involves not only the treatment of psychiatric conditions, but the transmission of Freudian ideas through physicians, nurses and educators to the general public and especially to families with growing children, that health is more than just the absence of disease, that health is a positive state of emotional and physical well-being, and all our experiences shape our adjustment to life.

As time goes on, a certain select group will continue in this special form of psychotherapy called psychoanalysis, but the other aspects of dynamic psychiatry that owe their origin to Sigmund Freud will join in the broad forward movement to human betterment.

Prometheus and To-morrow*

Eric Linklater

ONE of the several disabilities of contemporary life is the endless assault upon our minds of scientific discovery and the glittering inventions of applied science. At one moment we are staggered by the astronomer's revelation of galaxies beyond the galaxies that were charted yesterday; and scarcely have we accepted a new breach in the frontiers of the sky when we are summoned to applaud a new invasion of the bacteriologist's fearful kingdom by yet another successfully isolated antibiotic. The physicist, having profoundly alarmed us by a demonstration of nuclear fission, throws us into deeper consternation by the more dreadful menace of fusion; and the psychologist, after shocking us by an exposure of the sexual snake-pit that underlies our conscious minds, throws us into profounder gloom with his assurance that every human brain is still haunted by the ritual obligations of the Stone Age. In the material and visible world we see aircraft flying at supersonic speeds, and, desperately trying to keep abreast of them, we study aerodynamics, metallurgy, and jet-propulsion; while nightly, before an illuminated screen and entertainment that used (unfairly) to be confined to the nursery we are stimulated to think of the laws that govern the emission of electrons from a surface irradiated by light, and of the quantum theory of Planck that encouraged them to do so.

Amid all this new knowledge — of which my examples are but small fragments — a great deal of old knowledge has been lost. Two or three generations ago an educated person knew nothing of aerodynamics, nothing of Freud or fission, but, among other acquaintances, he would know something of the gods and goddesses who, in a classical imagination, once lived on Mount Olympus; and such knowledge had been common among educated people since the renascence of learning. To-day, however, it has vanished, and you may think it no great loss. The gods of ancient Greece were indeed often as wanton and irresponsible as the admissions of a patient on the psychiatrist's sofa, and their behaviour was no example for the industrious, obedient, and orderly inhabitants of a welfare state. But the mythology in which they lived is not without interest, and in this century of the world there is one of its larger figures — a giant in the shadow behind Olympus — who in particular deserves attention.

Promethes's Gift to Man

His name is Prometheus, and Prometheus was the friend of mortals. When Zeus, King of the Universe, was in a mind to destroy all human beings, Prometheus persuaded him to be merciful, and when Zeus refused to let men have fire, Prometheus stole fire from Olympus and gave it to mankind. For this he was punished: Zeus had him chained to a pillar in the Caucasus, where all day long a vulture tore at his liver, and his punishment was eternal, because

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*Inaugural address to the Leeds School of Medicine at the opening of the academic year, delivered on October 13.

Reprinted from the British Medical Journal, London, Saturday, December 24, 1955.

at night his liver grew whole again, and the vulture returned with the morning.

He had stolen fire, and fire was the precursor of all human arts and crafts. Without fire, man would have remained a beast of the field and the forest; but with fire he acquired power as well as comfort, he learnt to be a goldsmith and a cook, he bent iron to his will and distilled strong waters from the grain he cut. He grew in stature, and not only challenged the wisdom of the gods but disputed their existence: all because of fire. Little wonder that Zeus was angry with Prometheus! And because, in the first few centuries after the domestication of fire, it often broke out of control and consumed whole forests in a scarlet fury of destruction, men felt guilty in their possession of such a power — and transferring their guilt to Prometheus, who had bestowed it on them, imagined him as suffering perpetual torment.

We, in a new Promethean era, suffer in much the same way. We are not so simple, nowadays, as to believe in heavenly vultures with a taste for liver, but we never doubt the iron beak of *Angst*, or anxiety, and remorse of conscience that will return with the morning. Because we too, by the Promethean agency of the physicists, have taken power from nature, and nuclear fission has already consumed great hordes of people in Hiroshima and Nagasaki, as the forest fires of primitive times consumed the villages in their clearings and the deer and the birds that sheltered in their glades. So we who are about to enjoy the increasing power and comfort of our Promethean age, enter our inheritance with a knowledge of guilt, a sensation of fear, just as the successors to the first fire-raisers crossed the threshold of their heritage.

We should realize that they had good cause for dread; because fire in untaught hands can easily consume those hands, and all their neighbours. Very often, in the primitive ages of man, fire must have taken fearful toll of the innocents who warmed themselves beside it; and a primeval forest ablaze by night was no less terrifying to those who had escaped its heat, and stood to watch, than to us would be the blinding flash, the mushroom of smoke, and the burning city set alight by nuclear explosion. But our primitive forefathers survived their peril, and learnt gradually to keep fire under discipline. Fire, though still rebellious from time to time, became their invaluable and faithful servant, and nowadays we, in the civilized limitation of our lives, must stretch imagination to visualize men who could live without it. So, some two or three thousand years hence, may our successors on earth laugh and wonder how we existed in any tolerable comfort without nuclear energy to warm and move us and drive the great engines of our commerce.

To reinforce a little this optimistic view — it is easier, of course, to be optimistic at long range — let me remind you of another chapter in the Promethean myth.

Hope, The Immortal

Prometheus had a brother, Epimetheus, who was the fool of the family — the fool had a more ancient lineage than any aristocrat — and Epimetheus married a young woman called Pandora, whom Zeus had fashioned expressly for his torment. She was beautiful beyond all other women, but lazy, mischievous, and silly. (The type is not unknown to-day, and, whatever one may think of Zeus, one must respect him for forging a genetic strain that,

through the ages, has so well kept its heritable characteristics.) In Epimetheus's home Pandora found a box that Prometheus had given him, with a warning not to open it; but Pandora unlocked it, and out flew all the ills and curses of humanity that Prometheus had imprisoned: vices and passions, disease and old age, madness and the curse of daily work, out they came, and so vexed and bewildered men and women that they were tempted to a general suicide. From this untimely end, however, they were dissuaded by Hope, which also had escaped the box, where Prometheus had shut her up because Hope, as he well knew, was often delusive and a liar. But humankind was preserved by Hope, and Hope has lost neither her charm nor her youthful energy. Hope has long outlived Fear; for every age has had its peculiar fear, and that fear lasts no longer than its age. But Hope appears to be immortal, and is ever capable of inspiring new, fantastic enterprise and strange experiment. To-day, against all the odds, we hope and labour to make an end of war; there are those who hope also to make an end of the old reproach of "crying for the moon" by reaching out to it and fetching geological samples home again.

That this expectation will shortly be realized is, I understand, the confident belief of everyone in this country and the United States of America under the age of 12; and so large a faith may in time be substantiated. I myself have little interest in the moon except as a luminary. In my youth it often gave comfort and courage that daylight failed to instil, and now I take pleasure in its bright passage between the clouds, or in its seeming capture by the branches of a birch tree. But I have no desire to visit it. I should, however, dearly like to see the effect on my fellow-men of a successful voyage to the moon, and the safe return of the voyagers.

Should this happen within the lifetime of our present Monarch, then indeed there will be a new Elizabethan age to out-splendour Drake and Frobisher, Hawkins and Raleigh, Cavendish and the other great voyagers; and, as in the sixteenth century, the spirit of man will soar like an eagle to survey its new dominions with swelling pride and a recaptured assurance of illimitable power.

It would be an exhilarating age in which to live, and its exhilaration might, for a little while, ease and mollify some of the perpetual pains and difficulties that descended on man when Pandora so foolishly opened her box. But it would not, of course, abolish pain and difficulty, nor solve the ultimate problems of life. Human nature would not change, though under the pressure of increased excitement the suicide rate might fall, and more people of my age die of a coronary thrombosis. But human nature contains more than its sensibilities, more than a susceptibility to disease. It includes the obligations of the human condition.

Go to a slaughterhouse and watch the butchering of a sheep: what will first of all strike you is the extraordinary resemblance between its inner parts and those of man. Its organs are functionally the same, and the same organs exist in both anatomies. It may be that from your reading of history and observation of your neighbours you have detected other than purely physical resemblances — but a moment's reflection will assure you that the differences are even greater. Man, for example, has the privilege of laughter, and acknow-

ledges a compulsion to work. It may be that we learnt to laugh when we first realized how much of our work was useless, and how much would be wasted; but, notwithstanding that possibility, the necessity of work remains. It was one of the primary ills that Pandora let out of her box. It was commanded by the God of Israel, who declared, "In the sweat of thy face shalt thou eat bread." Karl Marx advised the workers of the world to unite, but, in view of the increased union dues that would be exacted, promised no respite from work. And every succeeding Chancellor of the Exchequer warns us that to maintain our standard of living we must work harder than ever.

Satisfaction of a Medical Career

With all that authority behind it, one must, I fear, accept the fact that work is inseparable from our condition — and this being so, you who have entered the profession of medicine deserve, I think, to be congratulated on your choice. You will, in the first place, have many superficial advantages. You will, unlike most professional men, be able — if you wish — to talk shop without boring your audience. For your audience will inevitably consist of persons who are subject to every ailment from arteriosclerosis to a sensation of fullness after food — who already suffer, it is probable, from psychological traumata and a cold in the head — and any reference to these, or to the organs and accidents from which they emanate, will be of interest to them.

You will, whether you practise medicine or teach it, enjoy a position of some authority, and a position of authority is a most useful — perhaps the most useful — safeguard against the anonymity, the feeling of being inconspicuous and undifferenced, from which so many suffer in industrial society. And, again unlike the majority of workers in what is agreeably called civilization, you will, in many cases have the gratification of seeing the success and conclusion of your work — unless, of course, you specialize in dermatology; but dermatology has its own rewards.

On a deeper level, you will have the permanent satisfaction of reading, simultaneously, a detective story that abounds in clues and has no end, and a poem, occasionally sublime, whose strength and tenderness, pathos and beauty, do not exclude some rough humour. You will for ever be asking yourselves, "What is the matter?" — considering clues, searching for new evidence, tentatively fitting a diagnosis — and before you have solved the mystery a new question will obtrude, teasing your minds afresh. I assume, of course, that you intend to be honest practitioners, not the sort of young doctor of whom it has been said (I believe I said it myself) that if his patient doesn't promptly respond to an injection of penicillin he sends him to consult a psychiatrist. Let us leave that kind of doctor to fiction in the knowledge that fiction performs a useful service, and return to reality.

The Light of Sublimity

The patient who is a living detective-story may also be, I suggested, a poem of many parts that can, from time to time, reflect the light of sublimity. This you may find hard to credit when you examine some shrivelled little man with hammer-toes and a smoker's cough; but even he, even the more

drably insignificant of your patients, will have had some experience of the wonder and mystery in which we live, and confidently he can expect more. He was born, and he will die; and no one who has seen birth and death can deny that "fearfully and wonderfully are we made," or dispute the mystery that develops us and, at the end, gives to the meanest a moment of dignity.

Between birth and death, moreover, even your little man with the smoker's cough may have shown humour in adversity, charity, magnanimity; and should you be required to make a post-mortem examination of his organs, you will certainly, if you examine them with sufficient understanding, feel something of the mood in which Rudyard Kipling wrote the poem called *McAndrew's Hymn*. There, you remember, the old fleet engineer looks down at the smoothly running engines that have carried his ship across half the world, and in the steady beat and hum of their working parts he hears an "orchestra sublime" and is moved to proper reverence:

> "True beat, full power, the clangin' chorus goes
> Clear to the tunnel where they sit, my purrin' dynamoes.
> Interdependence absolute, foreseen, ordained, decreed,
> To work, Ye'll note, at ony tilt an' every rate of speed.
> Fra' skylight-lift to furnace-bars, backed, bolted, braced and stayed,
> And singin' like the Morning Stars for joy that they are made;
> While, out o'touch o' vanity, the sweatin' thrust-block says:
> 'Not unto us the praise, or man — not unto us the praise.' "

Now if a man's mind can be so moved by a steam-engine it must surely respond with some emotion to contemplation of — shall we say? — the convoluted tubules of a kidney, the rhythmical capsule of the spleen, or the infinite benignity of a gall-bladder. Here are mechanisms far more delicate, exact, and perdurable than any steam-engine, and equally designed to work "at ony tilt an' every rate of speed." But the greatest, the wildest poetry is seen, not in the post-mortem room, but in the labour ward; for that emerging head may contain murder or genius — it may be another Einstein or Noel Coward — it may be a dutiful and submissive housewife or Rita Hayworth. And those small and crumpled hands, so nervously feeling the strangeness of the air, though in all probability they will never do anything more imaginative than fill up a coupon for a football pool, may write another *Divine Comedy*, another Fifth Symphony, or tease the conservative with the brush of a new Picasso.

The inauguration of the embryo is, in all cases, approximately the same; its intrauterine development follows lines now long established; but its future within the frontier of mortality, is unpredictable because in every viable birth there is an element of the mystery by which we are encompassed, and which, in tireless repetition, is expressed, but never explained, in a human quality that can neither be measured nor fully analysed, weighed nor dissected, adequately charted nor wholly defined: and that is personality.

An Altered Pattern

Here, I suppose, is the chief reward and prime difficulty of your profession: its practice is scientific (at least, one hopes so), but the practitioner should transcend the scientist. For the scientist relies on measurement and analysis, on observation and deduction; but the physician, who is dealing also with imponderables and qualities that can neither be analysed nor filtered, should also be something of an artist, who is inductive and capable by instinct of assessing the imponderable. A generation or two ago the artist-physician was a not uncommon figure, and in rural areas the art of healing had often superseded the science of medicine. For a doctor who had lived all his life in a country parish had often forgotten his textbooks, but learnt instead the nature and constitution of his patients, and, like an artist using a familiar palette to paint a familiar landscape, he could create at least an illusion of health — until, perhaps, the following winter brought the old cough back.

But nowadays the pattern has altered A young doctor does not often settle for life in a rural district, and even if he does his parish may become within a few years, a metropolitan dormitory, or be flooded to supply a hydro-electric plant. A social revolution has also done something to change the relationship between doctor and patient; and under the benign provision of the National Health Service the doctor's skill has become a sort of public reservoir from which all may drink at any time so long as they pay their water rate; and from which many are allowed to drink free. They were certainly humane and generous minds that saw the need for an easier and wider distribution of medical skill and the comfort of a doctor's care; they were minds most generously and resolutely determined on the betterment of their fellow-men that devised the mechanism of the Act; but inevitably they changed the public character of the doctor by bringing him into a closer relationship with the State. Some part of the populace abused their new privilege — having paid their water rate, they left the tap running — and there were many doctors profoundly disquieted by the apparent division of their responsibility on the one side the patient and their traditional loyalty to his interests, on the other their new paymaster, the State.

But the National Health Service is now almost ten years old, and I think it may be said that abuse has diminished, and disquiet been pacified. If this is so — and I can speak only with the slight authority of one who, being devoted to gossip, has gossiped over the years with a large number of people — if this is so, then the doctors themselves are chiefly entitled to the credit. They have — or the great majority have — resisted the temptation to which they were exposed: the temptation to become Civil Servants.

They realized the basic incompatibility between the deal of the Civil Servant and the ideal of the physician: for the physician, to be honest, must from time to time behave as a most uncivil master. The young doctor may be disconcerted, on his entry into the professional world, to find malingerers among his patients. But he will find them. He will find hysterical patients, and gentle, amiable men and women who cultivate their neuroses as carefully as roses and cucumbers are cultivated for a horticultural show. And how is he to deal with them? The textbooks supply only part of the answer, and to complete it he must use moral courage: moral courage and perhaps ingenuity.

There was an Army doctor I once knew who had discovered, and practised, a very useful therapy for malingerers. He would listen attentively to their imagined symptoms, then examine, with an air of increasing gravity, some unexpected portion of their anatomy. He was, if I remember rightly an Irish doctor. He would tell the man to return to duty, and report again in three days time: "For if you are no better, I'm afraid there's nothing for it but an operation." And he would lightly describe an operation compared with which the martyrdom of a Christian saint was no more than a summer cold.

Glamour of Surgery

I do not know how effective such treatment would be in civil practice, but under proper controls it might be worth a trial. In our society, where so many who once enjoyed authority are now regarded wihout fear, the surgeon still inspires awe, enjoys the reverence of lesser men, and speaks in a voice that no one — save his own colleagues — can hear unmoved. The surgeon, out of increasing knowledge, increasing skill, and a boldness increasing to a calculated audacity, has acquired a craftsmanship at once so strong and exquisite that almost one can say there is no breakage that he cannot repair — no visible and material failure of organic communication that he cannot rectify — no gross but circumscribed invasion of the tissues that he cannot extirpate. There are specialists, indeed, who can improve on nature: alter the shape of a lady's nose, modify the fullness of her cheeks, and reduce the number of her chins — and when, to his more solid achievements of removing a growing death from the abdomen or restoring to use a shattered joint there is added a dextrous ability to bring back a beauty that nature (or a motor accident) has destroyed, why, there is little wonder that the surgeon is not only regarded with veneration but invested with glamour.

Here I should remind you that glamour is not properly the attribute of a film actress who happens to combine an unruly temperament with a nicely developed figure. The word "glamour" is merely a corruption of "grammar," for which film actresses care little; and grammar, before it became the menace of the elementary school room, could mean the occult learning of scholars. It could mean the magic art — and to the layman the art of the plastic surgeon is close akin to that.

Justice, however, compels me to add that the surgeon, no less than his patient, owes much to the modern anaesthetist: without the anaesthetist the surgeon would have fewer patients, and patients would have less admiration for the surgeon's skill.

The World of To-morrow

But it is not my intention to offer a conducted tour of the contemporary clinic, the modern operating-theatre: a task for which I am quite unqualified. I have merely been taking a sidelong glance at some aspects of the profession you are about to enter, and may adorn, with the purpose of suggesting that, while some of you may die of overwork, none of you need perish of boredom.

With the purpose, also, of reminding those of you whose studies have precluded much study of the ancient world ,that mankind has had a fairly long

history, and on the threshold of a new Promethean age it is useful to recall the old one, and realize that men not only survived the peril of fire, but tamed it and made it their servant, and built upon the crafts that fire made possible a long succession of civilizations. Many of these have disappeared — whether by ill fortune or the growth of their own iniquity it is now hard to tell — but a by-product of the Promethean menage has outlived all the casualties of men, and is still with us, more exuberant than ever.

Hope, the miraculous survivor, came into the world — according to the myth — by the agency of Epimetheus, who was a fool, and Pandora, who was beautiful but silly; and Hope has been as good a servant to mankind as fire. I can find no explanation for her curious origin except in a theory put forward by my old friend, the late James Bridie, who was a good physician as well as a brilliant dramatist. He, in one of his plays, boldly asserted that "God is a very good biologist."

You may, of course, object that much of my argument is invalidated because Prometheus never existed; but that does not alter my case. For there was a Promethean age, and there is about to be another. And in the new world of to-morrow — among machines of hitherto unknown power, in the din of rockets taking-off for interplanetary space, between electronic brains that fortify the already dazzling intelligence of our scientists — in this new world mankind will still be subject to the ills and torments released from Pandora's box. You, as physicians, will have to deal with people who still suffer from all the old familiar diseases, as well as brand-new psychosomatic ailments of unknown origin — and in these circumstances, and with immortal Hope beside your chair, you may (I repeat) die of overwork, but it is quite unlikely that you will perish of boredom.

Case Report

AVULSION OF SCROTUM AND SKIN OF PENIS

F. L. Male
Age 27

Admitted July 20, 1944 this patient came in contact with the power "take off" of a spray outfit. When the episode was over, his shoes were off, his right sock was on and his left sock was off at the ankle. The only other part of his clothing left on was his shirt collar.

As the title intimates, his scrotal wall was torn off as well as the skin of his penis. The prepuce was left. The testicles were exposed and hanging free.

The scrotum and skin of penis, being in one piece and having been brought to the hosptial with him, were sutured in place on July 20, 1944, the day of his admission. This looked all right for about 8 days. It was then evident, if not at the beginning, that it would not do. The area developed a strong odor and the involved repair showed loss of vitality. It was necessary to repair this injury in some other manner.

Castration and amputation of the penis could have been done. The only thing in favour of this was shortening of convalescence. On August 3, 1944, fourteen days after admission, an area of skin 3 inches wide, and length from lower right costal margin to just above and to the right of the symphysis pubis was freed with the lower end remaining attached. The lower attachment was at an angle to allow more easily to bring the flap of skin around the penis. The skin of the abdomen next the area from which the flap was procured, was undermined extensively to allow approximation of the edges. The foreskin being saved made easier this repair as the skin flap was sewn to it. The abdominal (next abdomen) part of the new skin flap was sewn to the skin at the root of the penis. Some difficulty was experienced in getting this to heal. Healing took place much better when the penis was put in a plaster cast (over dressing). This cast had a broad base which in turn was strapped to the abdominal wall.

Skin was taken from the inner upper aspect of the thigh to make a container for each testicle. The skin here is loose and plentiful and easily adapts itself for this purpose. The skin was cut and sutured in such a way that it made a "bag" for each testicle.

The bladder was drained by a suprapubic catheter and a catheter through the penis. The one through the penis was sutured to the glands to keep it in place.

On Aug. 23, 1944 the pedicle flap was completely freed, that is, just a few days over one month.

Results eleven years later: Sexual activity is normal. The right testicle is of normal size and a definite bag has formed to contain same. The left testicle is smaller, atrophied to some extent and although there is a slight bag, it is not as good as in the case of the right. This may have been due to original trauma, although both looked normal at time of accident.

He has no pain or discomfort and is able to ride a bicycle without bothering him in any way.

The following photos give some indication of the man's condition at present.

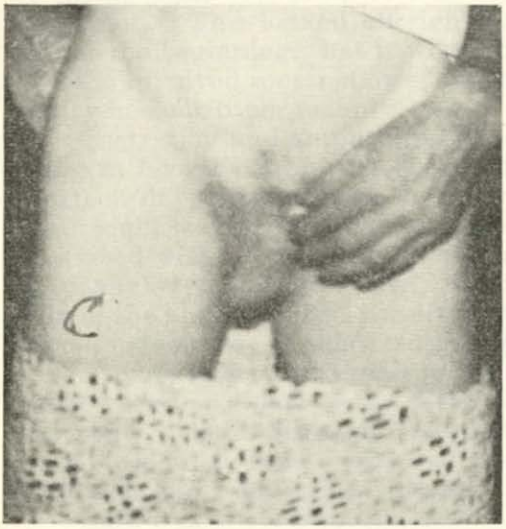
A —View of abdomen and penis.
B —Distance between index fingers show length of the skin graft.
C —Right side of "Scrotum".
D —Left side of "Scrotum".
E —"Scrotum" seen from behind.

Summary:

A case of avulsion of the scrotum and skin of the penis is described. A description of the method of repair is given. Photos taken eleven years after the injury and repair are shown.

R. A. Morash, M.D.


A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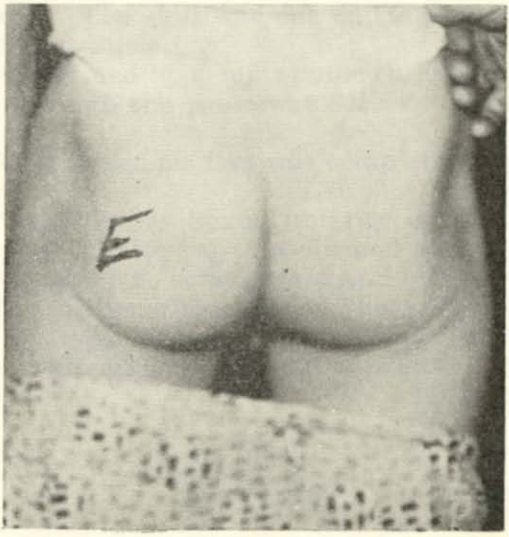
E

R. SAMUEL MCLAUGHLIN FOUNDATION,

217 Bay Street, Toronto

Toronto — Twenty-two young Canadian doctors — including one woman — have been awarded travelling fellowships by the R. Samuel McLaughlin Foundation, it was announced today.

The 22 successful candidates will pursue post-graduate study at world centres of medicine.

The 1956-57 list included eight doctors selected by the University of Toronto; three by the University of Montreal; two each by McGill University, Queen's University, the University of Manitoba and University of Western Ontario; one each by Laval University, University of Saskatchewan and the University of British Columbia.

The long-term objective of these annual grants is to raise the calibre of teaching staffs in Canadian Medical Schools, and finally the general practice of medicine throughout the country.

Under the terms of the Foundation "travelling fellows" are sent, at the end of their post-graduate training in Canada, for a year of study wherever new and important work is being done. In this way, it is hoped that Canadian medical schools will be kept in close touch with the medical advances being made in foreign laboratories and clinics.

Founded by one of Canada's leading industrialists, R. S. McLaughlin of Oshawa, the Foundation since its establishment in 1951 has granted more than 100 fellowships to Canadian doctors.

At the time of its establishment, Mr. McLaughlin expressed the hope that the Foundation would help counteract the exodus of brilliant young Canadian doctors to the United States. To date not one of the more than 100 "fellows" has left Canada.

The doctors chosen for the fellowships had previously been selected for permanent clinical appointments in teaching hospitals of Canadian universities.

Awarded fellowships for 1956-57 were: Dr. J. M. R. Campbell, (Anaesthesia), Toronto General Hospital, who will study in Scotland; Dr. C. M. Godfrey, (Physical Medicine), Toronto General Hospital, who will study in England; Dr. H. A. Smythe, (Medicine), who will study in England; Dr. T. R. Hanley, (Anaesthesia), who will study in Scotland; Dr. H. R. Hausler, (Ophthalmology), Toronto Western Hospital, who will study in Europe; Dr. W. N. Lotto, (Orthopaedic Surgery), Toronto Western Hospital, who will study in England; Dr. A Rapoport, (Medicine), Toronto Western Hospital, who will study in England; Dr. J. C. Lanskail, (Surgery), St. Michael's Hospital, Toronto, who will study in England.

Dr. A. M. Cloutier, (Surgery), Montreal General Hospital, who will study in England; Dr. A. D. MacDonald, (Medicine), Royal Victoria Hospital, Montreal, who will study in England; Dr. J. C. Giroux (Surgery), Notre Dame Hospital, Montreal, who will study in England; Dr. J. L. Picard, (Paediatrics), Notre Dame Hospital, Montreal, who will study in France; Dr. P. H. Stanley, (Surgery), University Hospital, Montreal, who will study in the United States; Dr. H. S. Cameron, (Anaesthesia), Victoria Hospital, London, who will study in the United States.

Dr. R. M. McFarlane, (Surgery), Victoria Hospital, London, who will study in England; Dr. C. Jean McFarlane, (Obstetrics and Gynaecology),

Winnipeg General Hospital, who will study in England; Dr. D. Snidal, (Medicine), Deer Lodge Hospital, Winnipeg, who will study in the United States; Dr. R. T. Vernon, (Radiology), Kingston General Hospital, who will study in the United States; Dr. A. M. Bryans, (Paedatrics), Kingston General Hospital, who will study in England; Dr. J. B. Potvin, (Medicine), St. Francis Hospital, Quebec City, who will do research work at the Toronto General Hospital; Dr. J. C. Dundee, (Medicine), Saskatoon General Hospital, who will study in England; Dr. Peter Allen, (Surgery), Vancouver General Hospital, who will study in the United States.

GENERAL PRACTITIONER WANTED

General Practitioner required to practise in association with long established troup in Dartmouth. Applications should be addressed to: The Business Manager, Dartmouth Medical Centre, Dartmouth, N. S.

Historic Case of Typhoid Mary

By James C. Spaulding
in The Milwaukee Journal

THE strange case of Typhoid Mary, an innocent agent of death, is recalled by the current outbreak of 27 cases of the disease in Wisconsin and Minnesota.

Medical men have advanced the theory that a typhoid carrier, preparing food or candy, may have caused the recent cases.

Typhoid Mary, as she was called in the early years of this century, caused at least ten epidemics, with 54 cases and three deaths by official count, before she was tracked down and identified by disease detectives The unofficial tally of the typhoid she spread was much higher.

The typhoid trail that science followed before "Mary" was discovered and finally incarcerated for life by the New York city health department is a tale that rivals mystery fiction.

Beginning of the story was in 1906 at Oyster Bay, N. Y., where typhoid broke out in a substantial household. From late Summer to mid-Winter, six of 11 members were stricken.

George A. Soper, a New York city sanitary engineer, was asked to investigate. Soper was familiar with the fact that patients could recover from typhoid symptoms but continue to spread the disease, a discovery made in 1903 by Dr. Robert Koch, famous German bacteriologist.

Soper's questioning of the stricken family disclosed that the first case appeared not long after the household had, for about three weeks, employed a new cook.

This cook was described as a tall, heavy, uncommunicative Irish woman, about 40, apparently in good health. Her name was Mary Mallon.

It could have been coincidence of course. So Soper checked health department records of other isolated outbreaks. There was one in suburban Mamaronek in 1900 and another at Dark Harbor, Me., in 1902. There was another that year at Sands Point, N. Y., and one each in 1904 at Oyster Bay and Tuxedo Park.

Soper felt confident that "Typhoid Mary," as newspapers nicknamed her, was a carrier of the disease

But where was she?

He assigned investigators to find out, hoping they would succeed before she caused another outbreak. Through employment agencies, they traced her to a Park Avenue residence but they were not quick enough. Two cases of typhoid had already occurred in the house.

A woman doctor was sent to examine Mrs. Mallon, but the cook refused. The doctor came back the next day with interns and three policemen. They carried Mary out, biting and kicking to a hospital.

Tests showed that the cook was a virulent carrier of typhoid bacillus. Even the strictest personal cleanliness could hardly have prevented her from passing along the disease micro-organisms on food she prepared.

Final episode was in 1915. An epidemic of 25 cases in Sloane Hospital for Women in New York City brought health department investigators. There

were two deaths.

A "Mrs. Brown" was the cook and culprit this time, but her real name was Mary Mallon.

When she left the hospital, carrying a dish of gelatin dessert to the home of a friend, she was followed. When she entered the friend's home, the house was surrounded by police and Mary was again taken into custody.

The health department never let her get away after that.

It built her a cottage with green shingled walls and white trimming on North Brother Island, and furnished it for her. There was a large shade tree on the neat little lawn.

She was allowed to cook her own meals and to entertain friends as long as she did not prepare food for them.

A mongrel dog was her faithful companion. After the dog died her health began to fail. She had to move from her cottage to a hospital.

She died of a stroke on November 11, 1938, at Riverside Hospital.

Obituary

The death occurred at Billings, Montana, in May, of Dr. William F. Cogswell, age eighty-seven years. He was born at Port William, December 5, 1868, and graduated from the Dalhousie Medical School in 1894.

For thirty-three years Dr. Cogswell worked to improve public health in the state of Montana, and carried out research in spotted fever and tic borne diseases. He was largely instrumental in obtaining the Federal Public Health Laboratory in Hamilton which has become known throughout the world for research and control of Rocky Mountain Spotted Fever.

Dr. Cogswell is survived by three sons and three grandsons.

PROGRAMME

103rd. ANNUAL MEETING

of

THE CANADIAN MEDICAL ASSOCIATION
NOVA SCOTIA DIVISION

THE MEDICAL SOCIETY OF NOVA SCOTIA
HALIFAX, N. S.

SEPTEMBER 4-7, 1956

Registration Tuesday, September 4, 1956, 4.00 p.m. to 9.00 p.m.

Wednesday, September 5, 1956, 8.30 a.m. to 6.00 p.m.

Thursday, September 6, 1956, 8.30 a.m. to 11.00 p.m.

Tuesday, September 4, 1956.

9.15 a.m. Executive Meeting.

1.00 p.m. Luncheon for wives and members of the Executive Committee, Courtesy Mayor L. A. Kitz and The City of Halifax, Nova Scotian Hotel.

2.15 p.m. Executive Meeting.

Wednesday, September 5, 1956.

9.30 a.m. Address of Welcome, Mayor L. A. Kitz, Halifax.

9.45 a.m. Opening Remarks—Dr. R. O. Jones, President.

9.50 a.m. "Acute Pancreatitis"—Dr. Wilfrid M. Caron, Quebec City, P.Q.

10.50 a.m. "Anticoagulant Therapy and its Indications"—Dr. Jean-Marie Delage, Quebec City, P.Q.

11.30 a.m. Visit to Exhibits.

11.45 a.m. First Business Session.

Opening Remarks by Dr. R. O. Jones, President, The Medical Society of Nova Scotia.

Introduction of Guests.

1.00 p.m. Luncheon—Nova Scotian Hotel

Speaker, Hon. Henry D. Hicks, Premier of Nova Scotia.

2.15 p.m. Business Session.

4.00 p.m. Adjournment for visit to exhibits.

4.30 p.m. Business Session.

5.30 p.m. Adjournment.

6.30 p.m.-8.30 p.m. Reception for Members and Wives at Ashburn Golf Club.

Thursday, September 6, 1956.

9.15 a.m. "The Treatment of Acute Thrombocytopenic States"—Dr. Jean-Marie Delage, Quebec City, P.Q.

10.15 a.m. "Diagnosis and Treatment of Ano-rectal Cancer"—Dr. Wilfrid M. Caron, Quebec City, P.Q.

11.15 a.m. Visit to Exhibits.

11.30 a.m. Business Session.

1.00 p.m. Luncheon—Nova Scotian Hotel.
Speaker, Dr. Renaud Lemieux, President, The Canadian Medical Association.

2.15 p.m. Business session.

4.00 p.m. Visit to Exhibits.

4.15 p.m. Business Session.

5.30 p.m. Adjournment.

6.30 p.m. President's Reception—Bedford Room, Nova Scotian Hotel.

7.30 p.m. Annual Dinner—Ballroom, Nova Scotian Hotel.
Speaker—Hon. A. H. MacKinnon, Antigonish, N. S.

10.00 p.m. Dance and Entertainment—Nova Scotian Hotel.

Friday, September 7, 1956.

9.15 a.m. Business Session.

Friday, September 7, 1956.

Meeting of the New Executive.

Time and place to be announced.

A Golf Tournament for the members will be held on Wednesday and Thursday. Prizes will be presented at the President's Reception, Wednesday, at 6.30 p.m.

PROGRAMME FOR LADIES

103rd Annual Meeting

of

THE CANADIAN MEDICAL ASSOCIATION
NOVA SCOTIA DIVISION

THE MEDICAL SOCIETY OF NOVA SCOTIA
HALIFAX, N. S.

SEPTEMBER 4-7, 1956.

Registration

Nova Scotian Hotel
Tuesday, September 4, 1956, 4.00 p.m.
Wednesday, September 5, 1956.
Thursday, September 6, 1956.

Tuesday, September 4, 1956.

Luncheon — Nova Scotian Hotel for Members of Executive Committee and their wives. Courtesy of Mayor L. A. Kitz and City of Halifax.

Wednesday, September 5, 1956.

11.00 a.m. — Coffee Party—Nova Scotian Hotel.

1.00 p.m. — Luncheon—Citadel Tea Room.

2.00 p.m. — Ladies Golf Tournament.

6.30 p.m. — Reception for Members and Wives, Ashburn Golf Club.
Ladies Golf Prizes will be presented at the Reception at Ashburn Golf Club.

Thursday, September 6, 1956.

11.00 a.m. — Coffee Party—Nova Scotian Hotel.

1.00 p.m. — Luncheon—Lord Nelson Hotel.

6.30 p.m. — President's Reception for Members and Wives, Bedford Room, Nova Scotian Hotel.

7.30 p.m. — Annual Dinner.

Speaker—Hon. A. H. MacKinnon, Antigonish, N. S.

10.00 p.m. — Dance and Entertainment.

Friday, September 7, 1956.

11.00 a.m. — Coffee Party—Nova Scotian Hotel.

Transportation will be provided for the Ladies to all Functions held outside the Nova Scotian Hotel; Inquire at Registration Desk.

CONVENTION EXPENSES DEDUCTIBLE

Through the columns of the C.M.A. Journal the profession has been kept informed of the efforts of the Income Tax Committee to retrieve the situation presented by the adverse rulings of the Income Tax Appeal Board and the Exchequer Court of Canada, in the matter of deductibility of the expenses of attending medical meetings.

In the C.M.A. Journal issue of February 1st was published the submission of the Income Tax Committee to the Honourable Minister of Finance on this and other matters, and indicated that copies of this brief had been sent to all members of Parliament. In the March 1st issue there was reproduced the annual memorandum on income tax returns by members of the medical profession. The uncertainties of the situation at that time dictated a very cautious statement under the heading "Convention Expenses."

In the issue of April 1st reference was made to the Budget Speech of a few days previously in which the Minister of Finance had announced his intention to amend the Income Tax Act to provide for the deductibility of the expenses of two conventions annually in Canada. While deriving considerable satisfaction at the admission of the principle, it was the view of your Committee that the geographic limitation was unfortunate. Representations were promptly and energetically made at this time and when the amending act was debated on first reading in Parliament. We urged that additional or alternative meetings in the United States or further afield should be recognized in view of the international characteristics of medicine and the commitments of many Canadian doctors as members of international societies. Little encouragement was given to your negotiators that any geographic relaxation would be granted and the Committee was obliged to conclude that the extension to cover meetings outside of Canada remained to be fought for another day.

The last act of the drama was played on July 31st in the House of Commons when the Minister of National Revenue proposed, and the Minister of Finance accepted, a modification of the amendment to the Income Tax Act, deleting the words "in Canada." A spokesman for the opposition expressed hearty approval of this change and indicated that a similar amendment had been ready for presentation. The removal of this geographic limitation has the effect of providing in the Income Tax Act itself authority for self-employed taxpayers to claim as expenses of their business or profession the cost of two conventions annually wherever they may be held.

Members of the medical profession and their patients are the chief beneficiaries of this enlightened piece of legislation because doctors attend meetings to teach and to learn. Members of The Association will be grateful to their Income Tax Committee for having waged so successful a campaign and to the members of Parliament of all parties for their acceptance of a fair and reasonable recommendation.

MINUTES OF ORGANIZATION MEETING OF THE MEDICAL SECTION — NOVA SCOTIA TUBERCULOSIS ASSOCIATION

A meeting of representative people, was called for and held following the "Diseases of the Chest Section" of the Annual Meeting of the Atlantic Branch, Canadian Public Health Association, at the Cornwallis Inn, Thursday, November 10th, 1955 at 8.00 p.m.

As Chairman of the Medical Advisory Board to the Nova Scotia Tuberculosis Association, Dr. G. M. Smith acted as Chairman, with the Secretary to the Medical Advisory Board, Ralph E. J. Ricketts as temporary secretary.

The purpose of the meeting was to discuss the advisability of actually setting up a Medical Section of the Nova Scotia Tuberculosis Association. This had been recommended by the Medical Advisory Board of the NSTA at their meeting on Monday, May 30, 1955.

At the Annual Meeting of the Canadian Tuberculosis Association in Winnipeg during June of 1955, a medical section of that organization was formed. One of its functions is to sponsor the formation of medical sections of the provincial associations.

The matter was placed before the Executive of the N.S.T.A. on Friday, October 21st, 1955, and the recommendation was endorsed by that body.

Dr. Smith spoke of the background of the idea, part of which has been given, and asked Dr. Hiltz, who had taken the initiative in the formation of such a group, to speak to the meeting. Dr. Hiltz spoke briefly on what the benefits of such a group could be, and mentioned also that we would be making history, in that we are the first provincial group to entertain such an idea and carry it to fruition. He wondered if the tuberculosis internist was losing interest in what was becoming a restricted field. He said too, that the aims at the moment were somewhat nebulous, but included a fostering of an increased interest in chest diseases by all physicians as well as those engaged actively in tuberculosis work. One of the aims of the C.T.A. was to sponsor Medical Sections in the provinces, and this was an opportunity to fall in with the Canadian trend, and stimulate interest in diseases of the chest.

Dr. Smith then expressed his views that this group could stimulate the interest of the general physician, and thanked Dr. Hiltz for his informative outline of the new group. There were further questions asked by those attending and to bring the matter to a head, Dr. Hiltz moved, seconded by Dr. Robb, that we form a Medical Section of the Nova Scotia Tuberculosis Association. Passed unanimously.

It was moved by Dr. N. F. Macneill, seconded by Dr. John Quinlan, that a committee be appointed to study a constitution and by-laws. The present constitution was presented by Dr. J. E. Hiltz and accepted on an interim basis with a report for the next Annual Meeting. Passed unanimously. The committee was made up of Dr. G. M. Smith, Dr. J. E. Hiltz and Dr. J. C. Wickwire.

It was moved by Dr. D. S. Robb, seconded by Dr. J. C. Wickwire, that Dr. G. M. Smith be the President of the Medical Section of the N.S.T.A. Moved by Dr. N. F. Macneill, seconded by Dr. S. E. Copp that nominations cease. Passed.

It was moved by Dr. J. J. Stanton, seconded by Dr. John Quinland, that Dr. J. E. Hiltz be Vice-president. Passed. Moved by Dr. K. R. O'Regan, seconded by Dr. S. E. Copp that nominations cease. Passed.

The Secretary-treasurer, non-elective is to be the Executive Secretary of the N.S.T.A.

The matter of dues as outlined in Section our of the by-laws was accepted. They will be sent directly to the N.S.T.A., and members will receive three hundred Christmas Seals, along with a receipt for income tax purposes.

Those present at the initial meeting were, Drs. G. M. Smith, J. E. Hiltz, D. S. Robb, E. L. Eagles, V. K. Rideout, J. C. Wickwire, N. F. Macneill, C. J. W. Beckwith, H. M. Holden, S. J. Shane, J. J. Quinlan, S. E. Copp, R. C. Young, A. Laretei, W. I. Bent, J. J. Stanton, K. R. O'Regan, M. Rostekao, J. R. Cameron, D. G. McCurdy, R. Ricketts.

On Motion of Dr. W. I. Bent, the meeting adjourned.

Abstracts

Catarrhal Otitis Media*

THERE are ever increasing reports of non-superative fluid in the middle ear in catarrhal or serous otitis media. The principal aetiologic factor in catarrhal otitis media is eustachion-tube obstruction. There are many factors predisposing the individual to eustachian obstruction. In children hypertrophic nasopharyngeal tumors as well as any lesion obstructing the ventilation of the middle ear may lead to eustachian obstruction. Mandibular fractures, mal-occlusion, and overbite are dental factors which tend to produce fluid in the ear. Acute or chronic infections of the nose, sinuses or pharynx frequently cause poor middle-ear ventilation by spreading to the eusachian-tube mucosa. The apparent increase in serous otitis media is largely due to the abortive action of antibiotics on purulent middle ear infections. The symptoms of acute catarrhal otitis media are: feeling of fullness or obstruction in the ear, hearing loss, head noises and occasionally vertigo. Treatment has two objectives: removal of fluid and prevention of reaccumulation of fluid.

Vasoconstrictors such as ephedrine one per cent or neosynephrine one-fourth per cent may be applied to the nasopharyngeal mucosa. When no purulent discharge is present, eustachian-tube inflations are part of the classical treatment.

The easiest method to remove fluid from the middle ear is to puncture the drum with a 20 or 22 - gauge needle and aspirate. In the treatment of chronic catarrhal otitis media, the keynote is prophylaxis. Flying should be avoided when upper respiratory tract infections are present. Acute attacks should be treated immediately and predisposing factors eliminated wherever possible.

Budetti, J. A., and Ieydell, E. M., Journal of the Kansas Medical Society. 57: 59 - 61, February, 1956.

Cancer of the Stomach*

The University of Minnesota's total experience with gastric cancer from 1936 to 1949 is presented. Eleven hundred and fifty-two cases of cancer of the stomach were seen at this hospital from 1936 to 1949. Eighty-one per cent had histologic or operative evidence of gastric cancer.

The delay from onset of symptoms to surgical treatment has not been shortened significantly during this period.

During the years 1936 to 1949 the average age of all patients was 62.8 years. A steady increase in older-age patients has been noted. Three times as many men as women had gastric cancer.

Examination of aspirated gastric contents for free hydrochloric acid and stool examination for occult blood are two important tests which may assist in the early detection of gastric cancer. Achlorphydria or hypochlorhydria were noted in 87.8 per cent of all patients tested; 83.2 per cent of all patients had occult blood in their stools.

A steady increase in operability and resectability with a resection mortality of 8.8 per cent occurred during 1936 to 1949.

Five-year survival rates have increased from an over-all rate of 3.7 per cent during 1936 to 1949 to 12.5 per cent during the period 1946 - 1949. The

five-year survival rate during the entire 14 - year period of patients undergoing resection for cure who were subsequently found to have lymph-node involvement with tumor was 11.4 per cent; of those found to be lymph-node negative 44.1 per cent survived for five or more years. During 1947 to 1949, over 70 per cent of patients resected for "cure" were lymph-node positive, of which 14.5 per cent survived for five years or more. During this same period, 57.1 per cent of lymph-node negative cases survived five years after gastric resection was performed.

The role of the surgeon is continually increasing in importance in improving five-year cures. Knowledge gained through "second-look" operations should enable us to continue to improve the five-year survival in the future.

Shalon, D. B., Horowitz, S. and Kelly, W. D., Surgery. 39: 204 - 211, February, 1956.

New Kidneys for Old*

The report of the successful transplanting of a human kidney by Merrill and his colleagues of Harvard brings hope to those ill with progressive bilateral renal disease. Earlier attempts at renal transplantation in man had not been successful. Merrill *et al.* have earlier reported their previous experiences in detail. In nine patients with severe bilateral renal disease in whom kidneys were transplanted, permanent function was not maintained, although in one patient a doctor with chronic glomerulonephritis — adequate renal function persisted in the transplanted kidney for five and a half months.

The knowledge that skin homografts between identical twins have survived permanently and the recent report of a successful kidney transplant between dizygotic cattle twins led the Boston workers to transplant a kidney from a healthy young man into his twin brother who had advanced and diffuse chronic glomerulonephritis. Later, both diseased kidneys were removed. The function of the transplanted kidney was excellent twelve months after the operation, and the patient has made a remarkable recovery. Before the transplant he was very ill with malignant hypertension and congestive failure and on one occasion he required treatment with an artificial kidney for uremia and convulsions. After the operation, the transplanted kidney began to hypertrophy; the patient improved rapidly, and his blood pressure was reduced to a range of 130 - 160 mm. Hg. systolic and 80 - 90 diastolic. Because of the persistent and mild hypertension, his two damaged kidneys were removed three and five and a half months after the renal transplant, and his blood pressure then fell to normal levels. The patient is now in good health; his activity is unlimited, and he has no apparent physical disability. Examination of the urine from the new kidney showed a proteinuria of 4.5 gm. per twenty-four hours, but no other abnormality.

Before the operation a geneticist determined beyond reasonable doubt that the twins were identical. This was done on the identity of their anthropological, immunological, and physiological (ability to taste phrenylthiocarbamide) characteristics when compared with their sibs. Later immunologic and genetic similarity was proved by the crossed transplantation of small skin grafts between the twins. The skin transplants took and when biopsies were taken a month later, they appeared to have survived as normal skin.

At the operation the vessels of the transplanted kidney were grafted on to the recipient's hypogastric artery and common iliac vein. The ureter was implanted into the bladder because experience in Boston with autotransplants of kidneys in dogs had shown that the organs survived permanently when the ureter was transplanted into the bladder rather than into other organs,when the auto-grafted dog's kidney deteriorated rapidly. Simultanous operations were performed on recipient and donor in adjacent operating rooms and although the donor kidney was ischemic for 82 minutes, the entire organ became turgid and pink immediately when the clamps on anastomosed vessels were releaed. A ureteral catheter was left in the donor ureter until the ninth postoperative day when normal function of the donated kidney was proven beyond doubt by prompt excretion of injected indigo carmine.

Identical twins are born approximately once in 350 births, and there cannot therefore be many patients with renal failure who will be able to benefit immediately from this work. But the fact that the operation is technically feasible should encourage those who are investigating the cause of failure in renal and dermal transplants in man and in animals. These and other related problems were discussed at length at a Ciba symposium held in London two years ago. At the meeting of the Central Society for Clinical Research in 1954, Good and Varco, of Minneapolis, reported successful transplantation of a homograft of skin in a child with agammaglobulinemia. Since skin and kidney possess a common antigen, it is reasonable to speculate that renal hemografts might take in patients ill with this rare disease. If agammaglobulinemia can be produced artifically in patients with renal failure, it may provide the answer to renal transplantation in man. On the other hand, it may exchange one fatal disease for another.

Lancet. 1, February 18, 1956.

Intraperitoneal Antibiotics Administered in the Treatment of Acute Bacterial Peritonitis*

Thirty-eight patients with acute diffuse peritonitis demonstrated at the time of operation have been treated postoperatively with the intraperitoneal administration of oxytetracycline or neomycin. There were no antibiotics employed post-operatively other than oxytetracycline or neomycin instilled intraperitoneally.

One or more organisms were cultured from peritoneal fluid obtained at the time of operation in thirty patients, despite the fact that preoperatively fourteen of these patients had received large quantities of antibiotics intramuscularly. On the other hand, a positive peritoneal culture was obtained post-operatively in only one patient following the institution of antibiotic therapy.

It is believed that the markedly high levels of oxytetracycline and neomycin in the peritoneal fluid that occurred following the intraperitoneal administration of each dose and diffusion of the antibiotic were responsible for sterilization of the peritoneal cavity in each of these cases.

Three of the patients in this series developed a pelvic abscess during their post-operative course; this 7.7 per cent incidence represents the only significant morbidity in this group of patients. Only one of these patients had a proved

pelvic abscess; the other two patients developed clinical signs and symptoms consistent with an abscess. There were four deaths in this series. Two of these deaths were due to a complete occlusion of both coronary arteries. The other patient was almost moribund at the time of operation and never completely reacted following operation.

The intraperitoneal instillation of tetracycline hydrochloride is contraindicated because of nausea, vomiting and intraperitoneal adhesion formation following administration.

There is little difference in the average peritoneal fluid and serum oxytetracycline and neomycin levels following administration of equal doses of the antibiotics intraperitoneally.

The intraperitoneal administration of ocytetracycline or neomycin is effective in treating patients with peritonitis. Intraperitoneal instillation of causes less discomfort than intraperitoneal instillation of oxytetracycline. Neomycin is considered the drug of choice for intraperitoneal administration.

Schatten, W. E., Surgery, Gynaecology and Obstetrics; 102: 339 - 346, March, 1956.

Parietal Pleurectomy for Recurrent Spontaneous Pneumothorax*

The presently accepted treatment for spontaneous pneumothorax and its complications is reviewed.

Exploratory thoracotomy and local wedge or segmental excision of the offending lesion appear to be the treatments of choice for recurrent spontaneous pneumothorax.

Parietal pleurectomy was devised as definitive treatment when exploration reveals subpleural involvement which is too extensive to make excision of blebs, cysts, or vessels practical or advisable from the pulmonary function standpoint. The operation may also be applicable in patients with recurrent or chronic pneumothorax who prove to have no detectable abnormality of the lung surface or show multiple cracks or leaks of the visceral pleura without associated blebs.

Pleurectomy is preferred over chemically or mechanically induced pleuritis because it entails fewer complications and shortens hospitalization and because the potential pleural space, and thus the chance of recurrence, is eliminated.

Complications were minimal after nine total or subtotal parietal pleurectomies. Objective studies of ventilatory function and bronchospirometry revealed no measurable loss of pulmonary function. Attempts at postoperative induction of artifical pneumothorax proved unsuccessful and there have been no recurrences of spontaneous pneumothorax proved on the side operatedupon

Gaensler, E. A., Surgery, Gynaecology and Obstetrics. 102; 293-308, March, 1956.
*From Medical Abstracts, March, 1956.

Chest Disease in Patients with Agammaglobulinemia*

Agammaglobulinemia is described from the point of view of the chest physician. It is pointed out that virtually all patients suffering from this condition present themselves to the physician because of recurrent pulmonary infections. Both children and adults seem to suffer all the complications of pulmonary infections including bronchiectasis, empyema, lung abscess, atelectasis and pulmonary fibrosis. With this knowledge it becomes particularly important for those concerned with the management of pulmonary disease to become aware of agammaglobulinemia as an entity.

It now appears that at least three forms of agammaglobulinemia exist. The first of these is the childhood or hereditary form of agammaglobulinemia which is seen only in males and appears to be transmitted as a sex-linked recessive trait. Secondly, and apparently separately, is the form of agammaglobilinemia which occurs in adults. This process may appear at any age and in either sex. The third recognized form of agammaglobulinemia is the transient appearance of hypogammaglobulinemia in infants during the first six months of life.

In both infants and adults the isolated deficiency of gammaglobulin appears together with a deficiency in immune processes and loss or suppression of plasma-cell formation. Probably as a result of these defects, patients with agammaglobulinemia exhibit extreme susceptibility to bacterial disease. The high rate of occurrence of brochiectasis in the presence of agammaglobulinemia suggests that electrophoretic studies on the serums of all patients with brochiectasis should be performed. In striking contrast to the susceptibility of these patients to bacterial disease is the fact that virus diseases have not presented a serious or special problem.

Treatment of patients with agammaglobulinemia is not yet satisfactory. However, replacement therapy in the form of injections of gammaglobulin appears to have some beneficial effect with children and prompt, vigorous antibiotic therapy of even minor infections is warranted.

Good, R. A., and Mazzitello, W. F., Diseases of the Chest. 29: 9 - 35, January, 1956.

*From Medical Abstracts, February, 1956.