

Editorial

THE Medical Society of Nova Scotia recently accepted with regret the resignation of Doctor Margaret Gosse, who has been Editor-in-Chief of the Nova Scotia Medical Bulletin since October, 1945.

Doctor Margaret Gosse came to the editorship at a difficult time, when the older doctors were war weary from over-burdened practices, and the younger ones just returning, were too busy trying to build up practices, therefore a steady flow of articles to the Bulletin was not always available. However, through hard work and ability she has kept the Bulletin to the fore, and to-day because of her services there is an increasing amount of material on the editors desk awaiting their perusal.

We, the editors, representing The Medical Society of Nova Scotia thank you Doctor Margaret for your eight years of devoted service.

C. M. H.

Presidential Address

J. W. REID, M.D., Halifax, N. S.

Your Honor, Honored Guests, Ladies and Gentlemen—

IT has been the custom for some years past for the President at the annual dinner to speak pertinently of matters urgently concerning the medical society, to give an account of his stewardship, and end by thanking his officers and committees. Tonight I will change that order and begin by thanking the officers and committees first. This has been a heavy year and one of its greatest surprises and pleasures has been the willingness and vigor with which the committees of this society took hold of the various and heavy burdens which were imposed on them during the past year, and I wish particularly to thank the members of the executive who came to our meetings and to thank the legislative committee under the able chairmanship of Dr. Allan Morton; the economics committee under Dr. Hugh McKay; the committee on fees under Dr. Titus and particularly the Centennial Committee chairmen, Drs. R. M. MacDonald, C. L. Gosse, R. O. Jones, A. R. Morton, Ray MacLean, Henry Reardon, Jean MacDonald and Hereford Still, and by no means least, the ladies committee! Lastly, I thank the superintendents and staffs of the Halifax hospitals whose generous and whole-hearted cooperation has made this Centennial the huge success it has been! It is no wonder that Nova Scotians are so famous abroad when Nova Scotians at home are so competent!

During this year two matters came urgently to the attention of the Legislative Committee. One was a revision of the medical act, an attempt by

the provincial government, the first since 1923, to bring the act up to date and to make some changes. This exercised us considerably for some time and it seemed that the new act would be worded agreeably to both parties when a noisier storm broke over the attempt by the chiropractors to become regularly licensed. The response of the doctors all over the province to our request for support was magnificent and when it became necessary, as it did, to present our case before the Committee of the House in the Red Chamber we were ably supported by briefs from Dr. Stevenson, Dr. Saunders of the Department of Anatomy, Dr. Weld of the Department of Physiology and Dr. Johnstone from the Department of Radiology. The thanks of the entire Medical Society are due these busy men who spared no effort to present our case strongly and effectively. Lastly, but by no means least, I wish to thank members of this society who, by their active interest and presence give it the vitality and power to carry on.

When on May 7, 1853, the Halifax Medical Society met to consider the unjust treatment of medical bills recently before the House, they decided to do what Halifax doctors have always done when in trouble—retire to their chambers, bare their teeth and call upon the doctors of the province to come to their rescue. Thus it was that letters were sent to ninety-odd duly licenced doctors in the province, and over seventy replies favorable to a Provincial Union came back. Thus out of the need for strength was our Society born! There our story begins!

Now, gentlemen, I realize that it is my duty to cover in detail the events of the last hundred years! What an interesting task it would be! But fortunately for you, it is impossible. It seems reasonable, however, to take a few minutes to make some comparisons of the circumstances of medical practice then and now. The first is that poor unfortunate fellow who is as constant and close to the doctor as his shadow, the patient! One hundred years ago life was simpler and harder for everyone, and much more so for the sick. The infectious diseases were largely uncontrolled, there was no anaesthesia, no asepsis and deaths from tuberculosis, diphtheria, puerperal sepsis, and typhoid fever were staggering. There were no hospitals, no laboratories, no x-rays and practically no specifics. Ah, you city-bred weaklings, how would you like to have amputated a leg before the days of anaesthesia or practiced mid-wifery in those dark and pain wracked days before natural childbirth? We look back at the hardships of travel, the absent diagnostic aids, the limited drugs and the loneliness of the practitioner and we wonder how they had the courage to carry on, and why, when they had seemingly so little to offer, the patient revered them so. We in this time can never fully appreciate or understand the respect and affection with which the sick regarded the physician of a century ago, who was called not because of the wonder drugs at his disposal, or the marvellous and certain cure he would work, but because he was kind and understanding, and knowing at least more of sickness than they, could be relied upon to do his very best in their time of trouble! Alas! As we came to know disease a little better, we came to know the patient less.

In those days there was no place to be sick but home! And a fairly efficient hospital it was! There was often a spacious airy sick-room with sun-

shine, good food and loving, if untrained, nursing care. There were servants to cook and clean and maiden aunts to wait upon and spoil the patient. There were the spacious double parlours for restful convalescence and lawns and gardens for quiet exercise and fresh air.

How all this has changed! The spacious bedroom has become a closet with double bunks, the servants are in the retail trade, the maiden aunts are in legitimate business, the double parlour has become the double garage, and the garden is in a paper box from the florists! Is it any wonder then, that as you pull your chair up in the hall and reach into the bedroom to feel his pulse, that he responds, when you ask to see his tongue, by showing you his Blue Cross Card instead? Here is no docile, adoring patient, but one who sits up, if he has the strength, and demands, "Cure me Doc, or else." The patient has changed! And I make this comparison because, regardless of accusations of lay groups, all the blame for the high cost of sickness does not lie with the medical profession! The patient himself must bear no small measure of the blame. How did this change occur? Who can tell? Perhaps when the doctor turned from the gentle humility of great ignorance to the brusque arrogance of a little learning, the patient, that chameleon, changed with him! He listened, read and observed. He became more enlightened and more cynical until today, he has lost faith in his mother's homely nostrums, has lost confidence in himself and his family doctor, is fast losing his faith in God, and has already lost many of the comforts of his religion, so that with every slight disturbance of body or mind, he turns to the nearest specialist to protect and prolong the only life he knows or feels sure of. Such a one soon develops the traits of the addict so that every taste he gets of free health service arouses in him an appetite, which if appeased, may go on to an insatiable hunger for medical care.

That is the ominous portend for those upon whose shoulders rest the burden of health planning in this country, and we who know best the facilities and capabilities of the profession and the desires and demands of the patients, beg that those who carry this responsibility, walk into the wilderness warily, and slowly!

And what of the doctor? How strongly must a man have been called one hundred years ago to enter the medical profession! How anxious he must have been to serve in humble capacity the suffering people around him. How discouraging it must have been to sit helpless at the bedside of children dying of diphtheria, and what nerve it must have taken to do the surgery of that day. Such a man must have been as courageous as a lion, as tender as a mother, as swift as an adder, and as gentle as a maiden in love! Where could their like be found today—save in Cape Breton!

In those days the doctor was everything; physician, surgeon, midwife, apothecary, confident and friend. He worked largely alone without diagnostic aid, without consultants and with a meagre list of specific drugs. He travelled almost entirely on horseback, and his work was done in his office and in the homes. There was in all Nova Scotia, no hospital except the old Bridewell in Halifax, and that without any facilities. Yet, so great was his prestige with the public, that when he fell ill himself, heavy traffic would

avoid a street in which he lay, straw would be strewn on the roadway to deaden the sounds of wheels and passers-by converse in quiet tones.

Picture the weary round of house calls, the hours of waiting in attendance on obstetrical cases in the home, the busy office, the clanging night bell and the dreary journey its summons must often have demanded, and you see a man of great physical and spiritual stamina, his life endurable only in the conviction that those who went before him had it worse and bore it better.

What has become of that courageous figure today? The long beard shorn by the development of asepsis gave way to the side whiskers, and these in turn to the moustaches and finally when all the hair was shaved away, we find not one but many faces! The stalwart figure of that other time is broken into many bits and the sum of all the parts seems less than the whole.

One of the brightest faces to emerge is that of the public health worker! If we look back to the years before the formation of the Nova Scotia Medical Society in 1853, before the formation of the Halifax Medical Society in 1844—if we look back to the very beginning of civilization in Nova Scotia, we find a continuous recurrence of epidemic disease beginning with the scurvy which killed 50% of Champlain's garrison in 1605. When in 1606 he attributed the halving of his death rate to better living conditions, he recorded the first public health study in the new world; and the post mortem which Deschamps performed on one of the victims was probably the first autopsy in America. Smallpox raged among the Indians in 1694 and again in 1749, and just a few months after the founding of Halifax, it killed a thousand of the settlers. Again in 1801 there were 8000 cases of smallpox recorded in and around Halifax.

Typhus and smallpox together caused 800 deaths out of a population of 11,000 inhabitants in Halifax in 1827. Is it any wonder that the thoughts of medical men and legislators turned to methods of prevention—and the first of these was the quarantine of infected ships and the appointment of a Port Physician in 1761. This was followed in 1779 by the appointment by the Governor of health officers in all counties and districts with wide powers to enforce the quarantine and health regulations then in force—the burning of infected clothing and bedding, burials, etc.

In 1832 the first Central Health Board was formed and this remained until 1870. The first mental hospital was built about 1854 and the first general hospital in 1859. The first organized attack on tuberculosis was begun in 1894. The first Department of Health was organized in 1904 and the first Minister in 1931.

The diagnostic and treatment services were begun in the 1920's, expanded in the 1930's and in some phases, mark these dreadful words, made free and compulsory in the 1940's. Ah well! So the times change and free men, dulled by the sweet wine of Socialism, so not yet feel the chains being forged to their lives. Now we here of new and broaden ventures in the offing. The Nova Scotia Medical Society is delighted by this evidence of growth and vigor and we assure our public health colleagues that as they struggle to emerge from the stench of their cess pools and sewers, members of our Society will always be on hand to lift them out of their dank world into the more soul-satisfying atmosphere of the healing art.

Consider the Radiologist: One hundred years ago equipment for visualizing the hidden structures of the body was simpler and more portable than it is today. It consisted of the eye, the ear, the fingers and the brain of the examining physician. But now the x-ray has replaced all these—not excluding the brain. When the German physicist Conrad Roentgen discovered the x-ray in November 1895, he withheld from the world his report until mid January 1896. This set the pattern for delayed x-ray reports which has been the vogue ever since!

When about the turn of the century a young graduate of Toronto University, Herbert Weaver, came to Halifax enthused with the idea of x-ray as a specialty—he found a complete absence of equipment. Presently he was commissioned to go to Boston and obtain equipment for installation in the Victoria General Hospital, and the department began to function about 1903 under his direction. The apparatus was primitive, though deadly, there was but little technique and no literature. It was their proud delight for many years to demonstrate to skeptical observers the solid outline of a silver dollar between the covers of a thick family bible—if you had a silver dollar!

Today, there is no phase of medicine or surgery which could function successfully without the diagnostic aid and treatment facilities of this important branch of medicine, which in these past fifty years has developed a strong society, a comprehensive literature, elaborate technique and more powerful and deadly apparatus.

Now, with commendable enthusiasm, they claim to be able to visualize your soul through a pile of greenbacks—if you have the greenbacks!

Consider the Anaestheseologist: Seven years before the founding of the Nova Scotia Medical Society, a Boston dentist, Dr. Morton, used sulphuric ether as an anaesthetic in dental surgery. It was the year 1846. The patient had hardly recovered from the anaesthetic before a Halifax dentist, Dr. Van Buskirk arrived in Boston to learn the technique. The dentist was hardly back in Halifax before a prominent Halifax surgeon, Dr. D. M. Parker waited on him and requested that he administer to him an anaesthetic. The surgeon, having made first hand acquaintance with the new method, had the ether administered the next day for an amputation of a leg, the first recorded use of general anaesthesia in Nova Scotia.

About this time, Sir James Simpson in Edinburgh, was experimenting with all manner of drugs to produce painless sleep, and finally administered to himself in 1847, an inhalation of chloroform. Soon he was in a profound sleep from which he fortunately recovered to tell the world of his discovery.

Since then, innumerable new techniques and substances have been used and today we find that the anaesthesiologist who began as a general practitioner pouring ether out of a bottle, is currently pouring the anaesthetized G. P. back into the bottle for storage on a museum shelf. Alas, the specialty that was conceived in the noble hope of making surgery painless for the patient has matured to the lowly task of making operations safe and easy for the surgeon!

What of the surgeons? No field of human endeavour has made greater progress either in technical skill or in benefits to the comfort and longevity

of the community than have these grisly knights of the mask and scapel. At the beginning of the century of medicine which we are celebrating tonight, one of the professors of surgery in Edinburgh was wont to say that a surgeon who attempted to open the abdomen should be indicted for murder. Yet, within a quarter century of the utterance of these words, there was brought to Nova Scotia from that same city, the technique which Lister had devised and which John Stewart brought so promptly to his native province—that technique which has made possible the exploration of every cavity of the body and set the bounds of successful surgery at the utmost limits of biological tolerance. Today these men can hold your throbbing heart within their hands and none would mark them save for honor. So has the scene changed that those who a century ago dragged their patients thru their operations asleep, but with their incisions infected and dirty, pass them quickly on today dazed but clean—completely cleaned!

What of the future of surgery? After our session on fees this afternoon, I say, "leave them to heaven!" For now that Maritime Medical Care is affiliated with Trans Canada Medical Services, the restless minds whose urge it is to conceive these vast expansions, will form an Interplanetary Medical Service Unlimited! Then will the surgeon truly come into his own. He can raise his fees as high as the stars, spend his days in sailing through the tranquil corridors of space and live forever in celestial grandeur.

Think for a moment of Psychiatry: From the time in the late eighteenth century when the French humanitarian, Phillip Pinel, struck the chains from the lunatics of Paris, the care of the mentally ill has been a story of steady but slow progress. How slow is indicated by the fact that more than a quarter century after Pinel's death in 1826, Nova Scotia had no hospital facilities whatsoever for the custodial or other care of the mentally ill. So pressing in fact, was the need that in 1844 the then mayor of Halifax, Hon. Hugh Bell, offered to donate his year's salary of three hundred pounds toward the building of a lunatic asylum. (Obviously the then mayor was a little suspicious of some of his aldermen too)! The medical men meeting to consider this and other matters presented by the mayor, formed themselves on October 26, 1844 into the Halifax Medical Society. The mayor subsequently agreed to let his offer stand towards the construction of a general hospital *if provision was made in it for the care of lunatics*. This battle is still being waged a century later though that hospital was never built due to lack of public interest. It was thirteen years later, after the intervention of the famous Dorothea Dix, that the Nova Scotia Hospital was built in 1857, and then called Mount Hope.

From that time psychiatrists remained in hiding, their own time biding, until they had grown great enough in numbers, strength and learning to break out (they prefer the term emerge) from behind the walls of these institutions for the care of the mentally ill, into the free society. This break out, beginning as it did about a quarter century ago, soon assumed the proportions, though unfortunately not the direction, of a "migration of the Leemings." So powerful was the impact of these colleagues upon the community of health care that the old guard physicians are still stunned and the psychiatrists themselves astonished!

Now we know that the time has not yet come when there is a coach under every patient, nor a psychiatrist by every bed, but all over the world there is a constantly increasing awareness of mental health problems and of their significance in the etiology of many organic diseases, which has led to a steady encroachment of psychiatry into the field of practice. The time has come when we must accurately determine whether the incidence of mental illness in minor and major forms is truly great enough, as the psychiatrists claim, to justify their demands for more and more teaching hours in the medical curriculum and ever expanding facilities and personnell. If such as they claim be so, then we must do all in our power to facilitate their emergence from behind their mahogany desks and tape recorders and get them out into the homes and sickrooms where they can do the most good!

Finally, let us compare for a moment the educational opportunities which were available to young men then and now.

In those years there was no medical school in Nova Scotia and only a fraction more than half the medical men in practise at that time had proper medical degrees. Of the 114 men practising in Nova Scotia in 1853, only sixty had medical degrees and half of those were Edinburgh. Liscensure at that time was by a committee of medical men appointed by the government, and the examination was generally held in one or other doctor's office and was entirely oral.

The American schools of this time were considered inferior to those of Britain and the Continent, plagued by innumerable diploma mills which were entirely dishonest and irrepressible and which continued to flourish even into the twentieth century. In the better American schools, even as late as 1870, the course consisted of only two years of five months each, with low matriculation standards. No attendance records were kept and hospital and clinical teaching was often inadequate. One of the common ways of obtaining medical education in the early days was by apprenticeship to a man in practise, a method being reconsidered today.

At the time of the founding of the Halifax Medical College in 1868, the course was of three years duration and compared favorably with the better American schools, having been patterned largely after the Edinburgh school where the course was also at that time three years. From that day to this as new knowledge was gained, new courses have been added, always by a process of accretion, adding years to the course and months to the years until the present seven years of nine months each from high school to basic qualification. And currently the American schools are increasing to eight years and expecting us to do the same. In addition, young men who wish to prepare for certification in a specialty, must spend an additional two to four years in resident training! Twelve years from high school to his first earning—one quarter or more of his productive lifetime in costly education!

What is the future of medical practise and medical education? Can the medical schools anticipate the trend and train the youth to meet the changed conditions, or must they, like the politicians, follow after the mob because they are their leaders. There is a challenge to medical educators today—

a challenge which all are fearful to accept—the challenge of complete and drastic revision of the medical curriculum!

Some points are coming clear to us in recent years, highlighted by the reports of many committees studying this problem here and abroad, particularly the able report of the Medical Curriculum Committee of the British Medical Association under the chairmanship of Henry Cohen of Liverpool:

- Vis: (1) The trend to specialization cannot be stayed, or turned.
 (2) The medical schools are no longer capable of conditioning a young man for general practise.
 (3) It is doubtful if medical schools should continue to plan curricula toward the end of graduating competent general practitioners.
 (4) That general practise is itself a special form of practise, to which fact the recently formed Canadian College of General Practise bears witness.
 (5) That acceptance of general practise as a special form of practise presumes special post graduate training.
 (6) That this presumption leaves a clear indication for developing a new or drastically revised medical curriculum—and if you listen carefully here you may catch the rattle of the bones of long dead deans—even a shorter course leading to a new or revalued basic qualifying degree.

In the light of the truth that a sound and progressive medical service must always rest upon an educated profession, medical teachers have been afraid to drop a line or a lecture from the curriculum lest they be accused of lowering the standard of medical education. The result is an overcrowded course and a driven student!

Education, however, is not to be found in a harried brain overcrowded with facts and the knowledge of technical skills, but rather in a mind trained to recognize pertinent facts, to consider them rationally and to act upon them wisely. Man cannot reason without facts, nor can he think with facts alone! One is reminded of that verse of the lover of leisure who wrote:

“Oh may we not be in such desperate haste
 That we may not one hour from the day's round waste,
 And in some quiet talk with fellow men
 Have strength renewed and minds refreshed again.”

It has been said that medical education today is not adequate to or compatible with the safe application of the dangerous techniques which science has placed at our command, and that the universities and medical schools have been guilty of favoring their youngest child, science, almost to the exclusion of the older cultural subjects. One is reminded of a verse from one of Eugene Field's childhood poems which reads:

“Oh mother, my love, if you'll take my hand
 And go where I ask you to wander,
 I'll lead you away to a beautiful land,
 That dreamland that's waiting out yonder!”

It seems to many that the sciences may be leading the universities and the medical schools down a primrose path to a dreamland where truth is never found and where faith, its only substitute, may be lost forever.

Truly, medical training must continue to be based upon the scientific method, but the depth of culture in the stream of medical education must not give way entirely to the bright and fascinating rapids of science—lest the tender care of the sick be wrecked on the hard, unsympathetic rocks of research!

We who profess some concern for the availability of medical services must have the vision and courage to plan the training which we believe will best enable the medical schools to provide in quality and numbers the practitioners of tomorrow.

Modern civilization would not be possible had not men found a way to make better things, in less time, at less cost. We too can find a way!

Though we may work in vastly different fields, though we may have differing opinions on education and practise, each and every one of us is aiming at the self-same goal—to succor the sick and banish disease from the earth! To that end this Society and the Canadian Association has an opportunity, nay, an obligation to develop the best medical service in the world! Poised as we are at the meeting place of the vast medical culture and experience of Europe and America we can and must draw the best from each! It is my belief that if governments will long enough resist the pressures of socialism; if they will consult with, be directed and restrained by the medical profession, we can, in this province and in this nation, develop, within the pattern of private enterprise and the dignity of personal responsibility, a medical service which will be the comfort of the sick, the pride of the profession and the envy of the world.

In conclusion may I borrow from the words of the Psalmist and say—
“Surely God has placed the feet of the medical profession in a large room.”
Let us endeavour always to be worthy of that magnitude!

A Century of Medicine in Nova Scotia

1853-1953

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THE main purpose of this paper is to review briefly the development of medicine in this province with special reference to points of historical interest. The sources of information for the earlier years have been various records; minutes of meetings, medical publications, county histories and items culled from provincial newspapers. The story of the later years, so well known to the present generation, belongs to the historian of the future.

When this Society was organized in 1854 there were in this province one hundred and fourteen physicians, sixty of whom had university training with degrees from medical schools as follows: Edinburgh, 28; London, 4; Glasgow, 3; Dublin, 2; New York, 6; Harvard, 4; Jefferson, 5; Penn., 7; Illinois, 1. Of the others, some had training under the apprenticeship system; many were self-styled physicians with no training at all; there was yet no legal control over the practice of medicine. At this period, Edinburgh was acknowledged to be one of the best medical schools in the world and many young Nova Scotians went there for training. It was still in the days of sailing ships, a voyage to Europe taking from three to six weeks and the comforts of travelling far from good. On account of the distance from home, most students were obliged to remain in the Old Country until training was completed—a period of three years. In spite of these difficulties, twenty-five Nova Scotians had gone to Edinburgh before 1850, and returned to their native province bringing the best that was then known of the Art and Science of Medicine. Many of these men played a leading part in the life of the province, and their accomplishments, medical and non-medical, are today matters of great historical interest.

At this time (1854) all the officers of the Society were Edinburgh-trained men, two of whom had only a few years before made medical history. In 1847, Parker operated on a patient under ether administered by Dr. Lawrence Van-Buskirk, a qualified dentist and physician. This was certainly the first time that a general anaesthetic was administered in Nova Scotia. In 1848, W. J. Almon had used chloroform on a patient at the City Alms House for the first time in Nova Scotia. The chloroform was made by Mr. J. D. B. Fraser, a chemist in Pictou.

Conditions of practice at this time may be noted. Certain infectious diseases such as smallpox, typhus, yellow fever, cholera and scarlet fever were too well known. The mortality was terrific: hundreds of the inhabitants died. Apart from vaccination for small pox, done at times against violent opposition, there was no adequate control. Quarantine measures were carried out, but were ineffective. It may be noted that two prominent Halifax physicians lost their lives by contracting fatal diseases—Dr. W. B. Almon from typhus in 1840 and Dr. John Slayter from cholera in 1866. Other diseases familiar to physicians at this time were gout, scurvy, malaria, Bright's disease, phthisis (not yet called tuberculosis and only diagnosed in advanced stages), pneumonia—called inflammation of the lungs—and a few chronic diseases. The stethoscope was in use having been first brought to Halifax by Dr. R. S. Black,

(President in 1860). It was of more service in lung diseases than for heart defects, the only valvular lesion diagnosed with confidence being aortic regurgitation, first described by Corrigan in 1832. The clinical thermometer had not yet been invented; degrees of fever were determined by the sense of touch, a favourite method being to place the hand in the axilla.

Surgical procedures were few: amputations, removal of accessible tumors, opening of abscesses, trimming and dressing wounds and setting of fractures: occasionally an open operation for strangulated hernia. Cataract operations were done at this time, and there is a record that a cataract was successfully removed by Dr. Webster of Kentville in 1836. Minor surgical procedures were: venesection, wet cupping and aspiration of fluid from various cavities. Dislocations of hip and shoulders were reduced with the aid of block and tackle. Obstetrics was a large part of practice: the midwife was a formidable rival. Quinine had been demonstrated as a reliable remedy for malaria, but with this exception, all drugs were used empirically, the main guide being the London Pharmacopia. Liniments, ointments, poultices and fly blisters were endowed with many virtues: leeches were used for blood letting.

Transportation in those days was primitive. Standard equipment for a doctor included a fine horse, saddle and a saddle bag which contained an ample supply of medicines. Some physicians spent more time in the saddle than they did in bed: rides of twenty or thirty miles were common. Parker, on one occasion, rode to Windsor, operated on a patient, and returned to Halifax without sleep—distance, ninety miles. Country roads were mere bridle paths. Carriages, used only in the City of Halifax, were not suitable for country calls. Most calls were made on foot or on horseback: boats were useful for calls along the coast. Horse and sleigh were useful in winter.

Modern indispensables which doctors did not have at this time were: antiseptics, hospitals, trained nurses, x-rays, laboratory aids, hypodermic syringes, cars, telephones and electric lights. The common method of lighting was the tallow candle and oil lamps—whale or seal oil. Kerosene oil, invented by Gesner, a Nova Scotian physician, was not yet on the market.

As the field of medical knowledge was very restricted, at least according to modern standards, and as the population was small, it is not surprising that many physicians sought and found outlets for their energies in non-medical fields. Some were Magistrates, Judges of Inferior Court of Common Pleas, Customs Officers, Sheriffs or even Postmasters. Some played important roles in political life. The first three Presidents of this Society were members of the Legislature, and another, Sir Charles Tupper, became a Cabinet Minister, Premier of Nova Scotia and Prime Minister of Canada, the only physician to attain this distinction. A few became prominent in business and prospered.

1854-1903

The most important advance in medicine of this period was the introduction of Listerian methods in surgery and obstetrics. Dr. John Stewart, a native born Nova Scotian and a graduate of Edinburgh University was a house surgeon to Lister both in Edinburgh and London. He came to Pictou in 1879, and at once took a leading part advocating Listerian principles in surgery in Nova Scotia. Some surgeons who were already familiar with Lister's work

were greatly stimulated and aided by Dr. Stewart, and his worthy colleague and friend, Dr. A. W. H. Lindsay, who was the first to demonstrate the carbolic spray in Halifax. It is well known that Listerian methods had been accepted and practised in Nova Scotia earlier than in the New England States and while there was still hostility to these methods by prominent English surgeons. This advance in surgical technique enabled surgeons to venture into hitherto forbidden fields, and abdominal surgery had its beginning. One of the first abdominal operations to be done was removal of ovarian cysts, some of which had attained immense size. Dr. Farrell removed an ovarian cyst weighing sixty pounds in 1880. Other early operations in this province were;—suprapubic lithotomy—Dr. John Stewart, 1891; hysterectomy—Dr. John Stewart, 1892; Caesarian section, Dr. John Black, 1892. The first appendectomy was done by Dr. C. A. Allan in Amherst in 1892. Before the end of the century several general practitioners in Nova Scotia had earned an acknowledged place as surgeons; John Black, Edward Farrell, N. E. MacKay, M. Chisholm and W. B. Slayter in Halifax, R. A. H. MacKeen in Glace Bay, J. W. MacKay in New Glasgow, and H. E. Kendall in Sydney. A few surgeons whose best work belongs to the twentieth century had a good start about this time; J. G. MacDougall in Amherst, H. K. MacDonald in Lunenburg and E. V. Hogan in Halifax.

The qualifications of Nova Scotia physicians during this period are interesting. Medical schools were slowly developing in the New England States, but were still inferior to the British schools. However, our young men for geographic and economic reasons went to the States. Between 1840 and 1900, three hundred Nova Scotians had American degrees, from Harvard, New York University, Jefferson, Bellevue, Baltimore or Pennsylvania. After 1870 many Maritime students enrolled at McGill, at this time recognized as one of the best schools on this Continent. Before 1900 sixty graduates of McGill were practising in Nova Scotia and by this time Dalhousie had supplied seventy. The stream of students to the States began to wane and from this time on McGill and Dalhousie trained the majority of Nova Scotian physicians.

The opening of the Medical School in Halifax in 1868 was an important event. It was the fifth medical school in Canada. To fully appreciate the wisdom and importance of organizing a school in the Province at this time, one must consider the stage of development of other schools of the same period. My authority for what follows is found in a biography of Dr. W. H. Welch, the distinguished Baltimore physician. Speaking of medical schools in 1870 he made some significant comments. He considered the best school in the United States to be the College of Physicians and Surgeons of New York, affiliated in some way with Columbia University. The course consisted of two sessions of six and a half months. Subjects taught were Anatomy, Physiology, Materia Medica and the Theory and Practice of Medicine. The teaching was mainly didactic, students having the privilege of attending three or four lectures daily. Clinical instruction in hospitals was poorly organized; there was no laboratory work; the microscope, although known was seldom used. There was no penalty for non-attendance at lectures. Certificates of apprenticeship were accepted. At the end of the course students presented themselves for examination, and, if successful, received a degree.

Considering the state of medical instruction in other centres at this time, the efforts of the medical men of Halifax should be regarded as a creditable and courageous undertaking. A teaching schedule was provided only slightly inferior to that of the existing schools, and the action taken at that time has been justified by the subsequent growth and present standing of the medical school of Dalhousie. The tablet placed in the Public Health Centre in 1928, the sixtieth anniversary of the school, pays this significant tribute to the founders; "They builded better than they knew."

The Victoria General Hospital, erected in 1865, was the first institution worthy of the name of hospital in this province, and without it the medical school could not have been a success.

Bacteriology. In 1893, a Provincial Board of Health was established by the Government and Dr. W. H. Hattie was appointed Bacteriologist at a salary of three hundred dollars a year, and a spending budget of one hundred dollars a year for equipment. A small room was allotted to him in the Victoria General Hospital. In 1902, a pathological wing was added to the Old Medical College, and Dr. Andrew Halliday was appointed full time pathologist and bacteriologist. Work done at this time included examination of sputum for tubercle and other organisms, throat swabs for diphtheria and various fluids for cells and organisms. Urinary sediments were studied carefully; pathological tissues were sectioned and studied: The Widal test was done frequently. Blood counts and smears were regularly done. Such was the modest beginning of pathology in this province. It should be noted that several physicians were doing good work in their private laboratories. For instance, Dr. D. A. Campbell (Dal 1875), had a microscope, staining fluids, culture media and an instrument for cutting sections and did considerable work in his private office before the Government Laboratory had been established. He visited Johns Hopkins almost every year and became familiar with methods used there.

A noteworthy feature of modern medicine has been the growth of medical associations which have contributed so much to the dissemination of medical knowledge and at the same time have created a spirit of good-will, harmony and friendship among the members of the profession. In this province, the Nova Scotia Medical Society has been meeting for one hundred years; many smaller societies have been organized. Before the turn of the century county societies were organized in Pictou, Colchester, Cumberland, Yarmouth, Lunenburg-Queens, Valley and Cape Breton. In Halifax the local society had different names; Halifax Medical Society. 1844-54; Clinical Society; Halifax Branch of the British Medical Association and finally the Halifax Branch of the C.M.A. The Maritime Medical Association functioned for several years. Nova Scotia has also played a significant part in the organization of the Canadian Medical Association in 1867. The first President was Sir Charles Tupper, and the second was Hon. D. McN. Parker, both former presidents of our provincial society. Before the turn of the century the only significant advance in *Materia Medica* was the use of thyroid extract—discovered by Murray in 1893—in myxoedema and cretinism. With this exception drugs were used without much change for fifty years. There was some talk about "Vis Medicatrix Natura", and faith in drugs was waning. The Homeopaths, while deluding themselves, taught us a valuable lesson regarding the limita-

tions of drug therapy, but the druggists had not yet suffered from diminishing sales.

The clinical thermometer in a useable form only came into use in the 1860's. The hypodermic syringe was increasing its field of usefulness and became more widely used when the pharmaceutical houses discovered how to make soluble tablet triturates.

Diphtheria antitoxin, discovered by Behring in 1890, was used by several men in this province before 1900. Tetanus antitoxin had also come into use.

A few things not yet used were rubber gloves, gauze sponges, X-Rays and laboratory tests as we know them today. The Wasserman had not yet been done, and lumbar puncture had not yet been attempted.

1903-1953

During this period advances in Medicine have been the most spectacular in history. The X-Ray and modern laboratory tests have reached an amazing degree of usefulness. Surgery, aided by intravenous therapy, blood transfusions, sulfonamides and antibiotics had been made safer and safer and many procedures formerly considered impossible are now done with gratifying results. Anaesthesia has been made safer and more pleasant to patients. Much has been accomplished in the field of Public Health; Treatment and control of tuberculosis deserves special mention. Hospitals have been established in Halifax and in all provincial towns, but are still inadequate for present needs. Trained nurses have increased in number and efficiency. This period is noted for the rise of specialists, a group made necessary by the bewildering volume of modern medical knowledge. Details of these advances are beyond the scope of this paper. A few comments of historical interest may be noted.

In therapeutics, remarkable discoveries have been made, salvarsan in 1910, insulin in 1923, liver extract in 1926 and then vitamins, sulphonamides, antibiotics, cortisone, A.C.T.H., heparin, dicumerol, thiouracil, and many others not quite so amazing. At the same time the older remedies have been subjected to critical review by pharmacologists, physiologists, chemists and clinicians with the result that many drugs hitherto considered valuable have been discarded and others, still in use, are more intelligently used.

Precision in diagnosis has reached a high plane, especially in the past twenty-five years. What the X-Ray and laboratory has done is too well known to warrant discussion here. The Wasserman devised in 1907 was first done in this province in 1915. The first record of a spinal fluid examination is dated 1901. A few years later spinal fluid examinations which included cell count, pressure readings, Wasserman and search for organisms furnished interesting evidence in meningitis and chronic nervous diseases, especially neurosyphilis. Routine blood pressures waited until 1910, when the anaeroid (Tycos) and non-spillable mercurial came into use. By 1912, the sphygmomanometer became an essential part of every doctor's equipment, and incidentally provided him with a new and profitable disease—blood pressure psychosis.

In the early part of this period, the pulse was described as regular, intermittent, skipping or grossly irregular. About 1910, largely due to the work

of James MacKenzie with his polygraph, the nature of irregularities became better understood and physicians were able to recognize with confidence extrasystoles, sinus arrhythmias, heart block and auricular fibrillation. The electrocardiograph first used in Halifax in 1926 furnished interesting evidence of heart disease. The most important evidence which it uncovered was the emphatic proof of the presence of a myocardial infarction. This entity, first described by Herrick in 1918, is now seldom missed by any physician.

Of the many scopes so far invented for examining directly the internal organs, the most valuable is the cystoscope, which with the aid of X-Rays and the laboratory has made a magnificent contribution to precise diagnosis of diseases of the kidney and bladder.

There is a tendency oftentimes to rely too much on laboratory tests and mechanical instruments in diagnosis. The wise physician gives due credit to all the wonderful mechanical and chemical aids, but should never neglect those natural instruments of precision, the eyes, the ears and the fingers which always have and still do reveal evidence of the highest value.

In conclusion, I hope that these comments may stimulate an interest in our medical history. There were some great men in our profession in the past and some of them were in Nova Scotia. As an appropriate ending I offer a quotation from the Chinese attributed to Confucius, "We ought to keep the dead before our eyes and honor them as if they were living."

NOTICE

Souvenir ash trays of the recent Medical Convention may be ordered for \$1.75 each. This includes parcelling and postage. Please send orders and money directly to Mr. Ernest Lorensen, Lantz, Nova Scotia. All orders to be in by December 1st.

The Lung as a Mirror of Systemic Disease

PART III.

Eli H. Rubin, M.D.

DISEASES OF THE SKIN AND MUCOUS MEMBRANES

THERE are a number of skin diseases in which the respiratory tract may be involved. Of particular interest are the pulmonary manifestations appearing at the inception of skin diseases as an integral part of the disorder. As a point of historical interest, Keil draws attention to the fact that Osler, as early as 1888, suggested that in certain skin diseases, notably the erythema group, alterations occurring in the skin have their counterpart in internal organs. Osler also noted that the visceral manifestations may precede the cutaneous ones. We have learned since that lupus erythematosus, sarcoidosis and several other "skin" conditions may not only affect internal organs but may never reveal themselves grossly in the skin during the clinical course of the disease.

In the average skin disease, encountered in office or clinic practice, a chest x-ray is seldom considered necessary and as a result much important information which might be obtained by this means does not come to light. Yet, there is evidence that even in apparently superficial skin disorders, the internal organs may be implicated. Discerning dermatologists have for years stressed the fact that few skin diseases are "skin deep." With increasing awareness of this truism, physicians are realizing more and more that the skin is a sensitive organ and often serves as a mirror of disease involving internal organs, including the lungs.

In the limited space available, the pulmonary manifestations of the following diseases will be discussed.

- Allergic Dermatitis
- Erythema Multiforme Exudativum
- Erythema Nodosum
- Sarcoidosis
- Systemic Lupus Erythematosus
- Scleroderma
- Dermatomyositis
- Acanthosis Nigricans
- Mycosis Fungoides
- Neurocutaneous Syndromes

Allergic Dermatitis: Fleeting pulmonary infiltrations, usually associated with eosinophilia, may accompany acute and chronic allergic diseases involving the skin. The dermatologist seldom gives thought to the lungs unless there is a complicating pneumonia; the physician interested in chest diseases is unlikely to see such patients because, as a rule, there are no symptoms or signs referable to the lungs and the roentgenologist, knowing little of the patient's history, is apt to be at a loss to explain any abnormal roentgen findings which may be discovered. The following instances are illustrative.

An elderly man had been convalescing from an acute pneumonia. Repeated chest x-rays during the illness had shown progressive resolution of the

process. Shortly before the patient was scheduled for discharge, a chest x-ray was taken to make certain the lungs were clear. The patient's physician was hurriedly called by a disturbed roentgenologist and told that the film revealed pulmonary infiltrations, probably representing miliary tuberculosis. When seen the patient was up and about feeling quite well but complaining of itching of the skin which was associated with an erythematous rash of the face, chest and upper extremities. Obviously, the condition was a late allergic reaction to the penicillin which the patient had been receiving. The finding of eosinophilia in the blood and the rapid disappearance of the pulmonary infiltrations coincidentally with the subsidence of the skin eruption confirmed this belief.

A woman of 21 had been under treatment for a severe form of neurodermatitis and seborrheic dermatitis. Repeated chest x-rays had failed to reveal any abnormalities. Several blood examinations had shown nothing unusual, the eosinophil count averaging 1 per cent. On one occasion the patient developed fever and chest pain. A chest x-ray revealed irregular, linear infiltrations in the lower portions of both lungs and accentuation of the hilar markings. Blood counts at this time showed a moderate leukocytosis with 10 percent eosinophils. Subsequent blood counts revealed an eosinophilia as high as 16 percent. The sputum also contained eosinophils but no acid fast organisms. The infiltrations disappeared gradually and the lungs resumed their previous state (Fig. 18).

Frostberg relates of a 26 year-old woman who was treating herself with mercury ointment for scabies. The patient developed an acute dermatitis with fever, rapid pulse and leukocytosis; no eosinophilia. Chest x-rays disclosed reticular markings in both lower lung fields. With the fading of the exanthem, the roentgenogram resumed its original configuration. Prompted by this experience, chest x-rays were taken routinely of all patients with acute generalized dermatitis where, according to the author, "the clinical findings were of such a nature that lung affections might be suspected." In less than a year Frostberg encountered a man of 40 with an intense dermatitis, probably due to barbiturate medication. The chest x-ray revealed mottled and reticular densities. In addition, there was an eosinophilia of 12 percent. The infiltrations cleared with the disappearance of the exanthem. Two similar experiences were reported by Falk and Newcomer. The cause of the fleeting pulmonary infiltrations in their cases was believed to lie in an allergenic penicillin-oil-wax preparation which was being administered for early syphilis.

It might be mentioned also that, so-called, "creeping eruption" of the skin (cutaneous helminthiasis), endemic in the Southeastern coastal regions of the United States, may also be associated with migratory pulmonary infiltrations and eosinophilia. Wright and Gold encountered 26 patients of a total of 52 who had transitory pulmonary infiltrations associated with eosinophilia. None of the patients had symptoms or signs of systemic disease. On the basis of the experiences mentioned and of others, which cannot be cited in detail, there is no doubt that if routine chest x-rays were taken of patients with allergic skin diseases, a significant number would be found with transitory pulmonary infiltrations and eosinophilia such as one encounters in Loeffler's syndrome (see Part 2).

Erythema Multiforme Exudativum: This disease is characterized by pleo-

morphic changes in the skin, chiefly of the extensor surfaces of the limbs, consisting of erythema, papules and/or vesicles and bullae. The seasonal incidence of the condition, at times epidemic occurrence, febrile course, mononuclear, non-bacterial character of the cellular exudate and the simultaneous appearance of pneumonia in some instances, strongly point to a generalized infection probably caused by a virus. An allergic factor has also been suggested. A feature of one form of this disease is the occurrence of stomatitis, conjunctivitis and balanitis, also occasionally in association with pneumonia. This symptom complex is variously designated as "eruptive fever," "mucosal respiratory syndrome," "Stevens-Johnson syndrome" and by several other descriptives.

In 1937 Keil was among the first to draw attention to the fact that erythema multiforme exudativum is often associated with involvement of the trachea, bronchi and lungs. The prominence of pulmonary symptoms and the integral part which the respiratory tract plays in this disease was also stressed by a Commission on Acute Respiratory Diseases created during World War II. More recently Finland and associates reported six cases of erythema multiforme exudativum associated with pneumonia. Stanyon and Warner observed 17 military personnel with skin and striking mucosal lesions, 14 of whom had pulmonary involvement at sometime during the course of the disease. The clinical features of pneumonia occurring in association with erythema multiforme exudativum resemble those seen in the primary atypical variety.

When the respiratory tract is involved in the course of erythema multiforme exudativum, the disease in the lungs usually manifests itself as a simple bronchitis in association with acute mucosal lesions of the mouth, larynx and pharynx. Occasionally there is gross parenchymal involvement appearing in the chest x-ray as (1) bilateral miliary or nodular densities simulating tuberculosis, or (2) patchy infiltrations in keeping with bronchopneumonia, or (3) uneven massive consolidations (Fig. 19). The pathological changes in the lungs consist chiefly of acute congestion and infection.

Erythema Nodosum: This disease is characterized by the appearance of discrete, red, tender nodules of varying size in the subcutaneous tissues especially of the forearms and legs. The nodules may appear in crops. The eruption may be preceded by a febrile seizure associated with sore throat, joint pains, and other systemic manifestations. The nodules gradually change in color, a yellowish pigmentation of the skin, persisting for a considerable time after the disappearance of the lesions. The nodules are composed of fibrinoid degeneration of connective tissue septa and granulomatous foci of histocytes and lymphocytes with occasional giant cells of the foreign body type.

The cause of erythema nodosum has been a subject of much discussion. Earlier observers considered the condition a specific disease. The hypothesis of specificity became less tenable as increasing numbers of diseases were found to be associated with a similar type of self-limited skin eruption. In the Scandinavian countries and in England, erythema nodosum is often associated with recently acquired tuberculosis infection. In America the incidence of the association of erythema nodosum and tuberculosis is considerably less. Erythema nodosum may accompany rheumatic fever, coccidioidomycosis or may follow the administration of sulfonamides and other drugs. Löfgren and

Wahlgren, in a study of the histopathology of 64 cases, concluded that the histological picture in the skin is in keeping with an allergic reaction. There is increasing support for the belief that erythema nodosum represents a non-specific hyperergic response to a variety of infections, chemical and toxic agents.

The intrathoracic manifestations of erythema nodosum concern chiefly, often exclusively, the hilar lymph nodes. However, the lung parenchyma may be involved without noteworthy participation of the lymph nodes. In the young, one is more likely to find a unilateral hilar density extending fan-wise into the adjacent parenchyma (Fig. 20A). In adults the hilar tumefactions are larger, more often bilateral, and the lung parenchyma is more apt to be involved (Fig. 20B). Of particular interest, from the viewpoint of differential diagnosis, is the striking resemblance roentgenologically of erythema nodosum and sarcoidosis. In fact, Kerley found that approximately 25 percent of patients with sarcoidosis gave a history suggestive of erythema nodosum.

Sarcoidosis: In 1899, Boeck described a condition of disseminated nodules in the skin characterized histologically by tubercle-like structures composed of epithelioid cells, small numbers of lymphocytes and occasional giant cells. The tissue changes seemed consistent with sarcoma and Boeck's sarcoid shortly became accepted in dermatology as a distinct form of skin disease.

In 1914, Schaumann expressed the view that Boeck's sarcoid was a systemic disease, a benign lymphogranuloma, which may involve many organs. Other investigators, unaware of the unified morphological nature of the disease, described a number of atypical forms depending on the combination of organs involved. The better known are (1) Heerfordt's disease or uveoparotid fever characterized by inflammatory lesions of the uveal tract of the eye, swelling of the parotid glands and prolonged, low-grade fever; (2) Mikulicz's disease characterized by enlargement of the salivary and lachrymal glands and (3) Jüngling's disease characterized by cystic changes in small bones.

Sarcoidosis typifies par excellence the thesis under discussion. Initially considered a skin disease, it has been found to affect diverse tissues and organs of the body, including the lungs. In fact, the latter are more often involved without accompanying skin manifestations. It may be hypothesized that a state of affairs duplicating sarcoidosis may be found in other diseases. Possibly certain abnormalities in the lungs of indeterminate nature, discovered in routine chest x-rays, apparently limited to these organs and their appendages may represent *formes frustes* of more widespread disease. One might expect to encounter such occurrences in patients with diffuse interstitial pulmonary fibrosis, or transient infiltrations, or unexplained hilar tumefactions, or recurring pleural effusions and other unexplained pleuripulmonary conditions. With the development of new techniques in diagnosis and treatment, it should be possible eventually to assign these various pulmonary involvements their proper place.

Sarcoidosis affects chiefly adults of the third and fourth decades, but infants and aged are not immune. Instances of sarcoidosis have been reported in members of the same family. The disease is found with about equal frequency in the two sexes; possibly more often in females. In the Scandinavian countries, England and on the continent, Nordics are mainly

affected. In the United States, Negroes are particularly vulnerable. Of approximately 300 cases of sarcoidosis encountered in the armed forces of the United States, six times as many cases of the disease were found in Negroes as compared to Whites. Longcope and Freiman were able to collect records of no less than 160 cases treated in only two institutions. The literature at the time of this writing contains reports of approximately 130 autopsied cases. Obviously, systemic sarcoidosis is a fairly common disease and carries with it, in many instances, grave implications.

The cause of sarcoidosis is unknown. It is difficult to conceive of sarcoidosis being a variant of any known disease. There is every reason to believe that sarcoidosis is not an atypical form of tuberculosis, a view still held in some quarters. The fact that the administration of cortisone and ACTH is often followed by rapid amelioration of symptoms and that these are paralleled by regressive changes in the affected tissues is highly suggestive that sarcoidosis is an allergic disease. It should be noted that sarcoid-like granulomas may be found in brucellosis, syphilis, tularemia, blastomycosis, leprosy and several other granulomatous conditions.

The earliest lesions of sarcoidosis are found in lymph nodes. The affected tissues becomes the seat of discrete epithelioid or, so-called, "hard" tubercles, arranged in clusters approximately of the same stage of development (Fig. 21A). There is little or no necrosis and no acid fast organisms can be cultured unless there is superimposed tuberculosis. In the process of healing the tubercles merge and lose their identity, in time undergoing fibrosis and often hyalinization. In the lungs one cannot differentiate the diffuse interstitial fibrosis due to healed sarcoidosis from fibrosis resulting from other causes unless one is familiar with the clinical course of the disease. In addition to the fibrotic reaction and scattered grayish nodules, the sarcoid lung reveals a variable degree of emphysema and often bleb formation. Bronchiectasis is not uncommon and smooth-walled cavities may be present showing no caseation or sarcoid changes in the walls.

The histopathology of sarcoidosis is occasionally featured by the presence of inclusion bodies. These were first described by Schaumann in 1948. These, so-called, Schaumann corpuscles are refractile, stratified, occasionally calcified masses in the giant cells of the tubercles. They are found mostly in lymph nodes but also in other organs, including the lungs. In 1944, Friedman described an asteroid or radial form of inclusion body. Neither type of inclusion body is specific for sarcoidosis (Fig. 21B—C).

In spite of multiplicity of organ involvements, the symptoms and signs of systemic sarcoidosis seldom reflect the extent of the disease. This applies especially to intrathoracic disease. Physical examination may reveal enlarged lymph nodes, skin lesions, possibly an associated erythema nodosum, a palpable spleen and liver. The several syndromes of sarcoidosis mentioned previously are featured by distinctive clinical pictures. An interesting finding in sarcoidosis is the obtainment of a negative tuberculin skin reaction. However, Hodgkin's disease, mycosis fungoides, intercurrent acute illnesses in the course of tuberculosis, as well as moribund states may also be associated with negative tuberculin skin reactions. That the phenomenon is not specific for tuberculin is shown by the fact that patients with sarcoidosis may show depression of skin sensitivity to extracts of *Canida albicans*, *Trichophyton*

gypseum and mumps virus (Friou). Active sarcoidosis is associated with an elevation of the globulin fraction of the blood, chiefly the gamma fraction, with a resulting increase in the total serum proteins and a reversal of the albumin-globulin ratio. With subsidence of the disease, the A/G ratio tends to return to normal value. The reversed A/G ratio and the clinical activity do not necessarily parallel. In addition, there is often an elevation of the serum-calcium, a slight elevation of the serum-phosphorus and of the non-protein nitrogen.

The blood changes in sarcoidosis are not remarkable. The erythrocyte sedimentation velocity is increased during the active stages of the disease. The leukocyte count is usually within normal range except during febrile seizures when leukocytosis is present. Although a moderate eosinophilia is common, neither its presence nor absence is of diagnostic value. Histologic examination of tissues removed of patients suspected of having sarcoidosis is the most important single means of diagnosis. But, as indicated previously, the mere demonstration of sarcoid structures is not sufficient to diagnose systemic sarcoidosis unless confirmed by clinical and roentgenological findings. The most likely sites for the obtainment of adequate biopsies are the skin, lymph nodes and liver.

The Kveim test is helpful in the differential diagnosis of sarcoidosis. The test consists of an intracutaneous injection of saline suspension of sarcoid lymph node obtained from a patient with sarcoidosis. In recipients with active sarcoidosis a nodule develops in the skin which duplicates histologically the sarcoid granuloma. Although a positive reaction is rarely obtained in the absence of sarcoidosis, the Kveim test is not specific since sarcoid-like lesions may follow intracutaneous injections of suspensions of normal spleen, tubercle bacilli, killed or living, silica-containing material and other substances. In patients with inactive sarcoidosis the Kveim test is often negative.

In the differential diagnosis of obscure pulmonary diseases, sarcoidosis is nearly always a consideration. The disease is accompanied by so few symptoms referable to the chest that patients seldom seek medical attention unless the condition is associated with involvement of the skin, eyes, salivary glands or occurs in one of the bizarre combinations mentioned previously. Intrathoracic sarcoidosis is often discovered accidentally in the course of routine chest x-ray examinations. Although sarcoidosis presents roentgenologically a remarkably variegated appearance three broad patterns, often overlapping, may be distinguished: (1) a hilar form, (2) a transitional form and (3) a parenchymal form. The first is characterized by hilar lymph node enlargement. At this stage the disease is apt to be confused with a malignant lymphoma. The transitional form combines enlarged hilar lymph nodes and parenchymal involvement simulating lymphangitic carcinoma. The parenchymal form is often mistaken for pulmonary tuberculosis. The last mentioned may assume the appearance of diffuse miliary or nodular foci or irregular densities affecting chiefly the upper and midthirds of the lungs. The parenchymal form of sarcoidosis may also simulate fungous infections, dust inhalational diseases and indeterminate fibroses and emphysema. Sarcoidosis has, in some respects, taken the place of the once popular "chronic pneumonitis" as a scrap basket of many pulmonary diseases whose etiology is unknown. Figs. 22, 23, 24 illustrate the more common forms of intrathoracic sarcoidosis.

(To be continued in next issue including Figure 24 and Bibliography.)

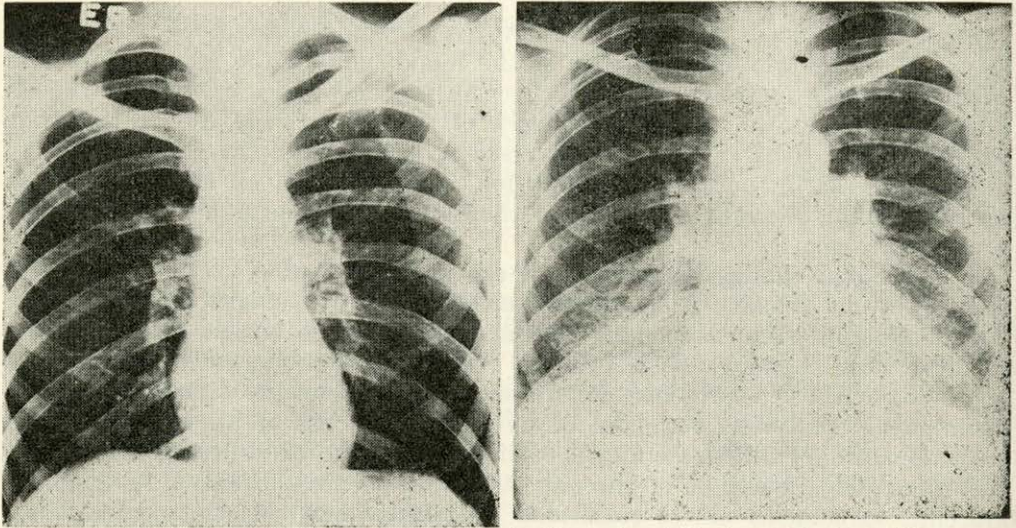


Figure 18.—Pulmonary infiltrations associated with eosinophilia in a girl of 21 with neurodermatitis and seborrheic dermatitis. A. Chest x-ray shows no abnormalities. B. Seven months later, lower lobes show diffuse reticular infiltrations; accentuated hilar markings.

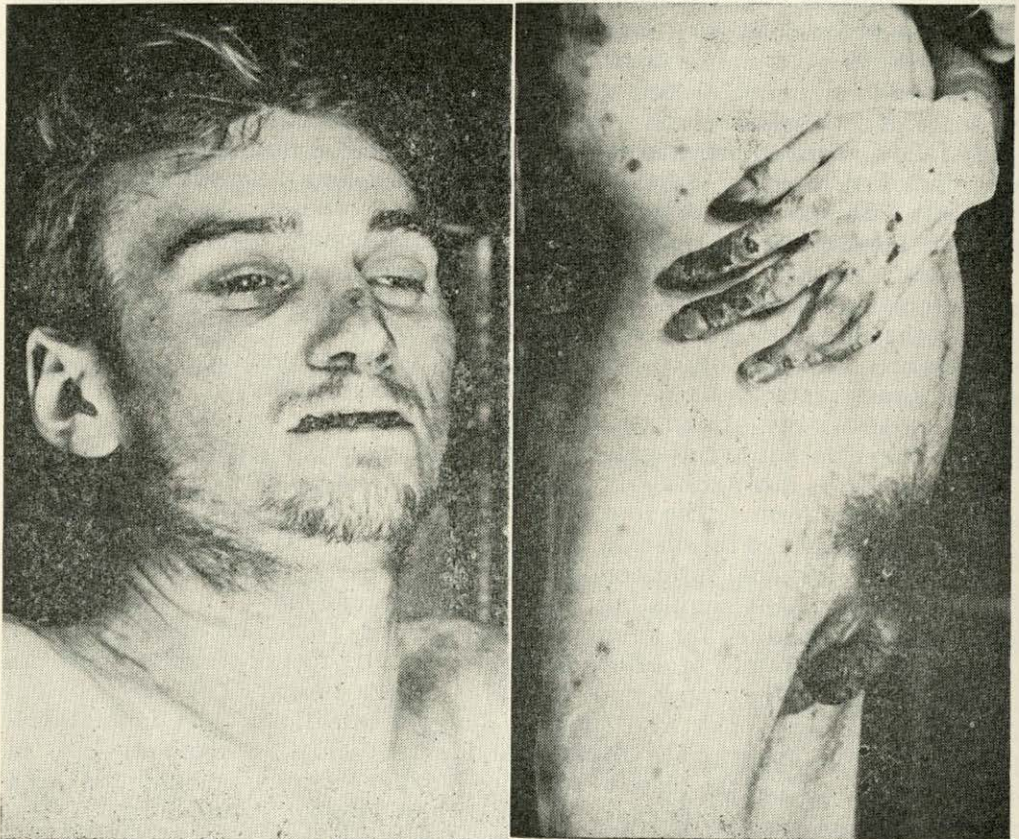


Figure 19.—Erythema multiforme exudativum in a man of 24. A and B. Appearance of the lesions on the face, eyelids, lips, hands and trunk.

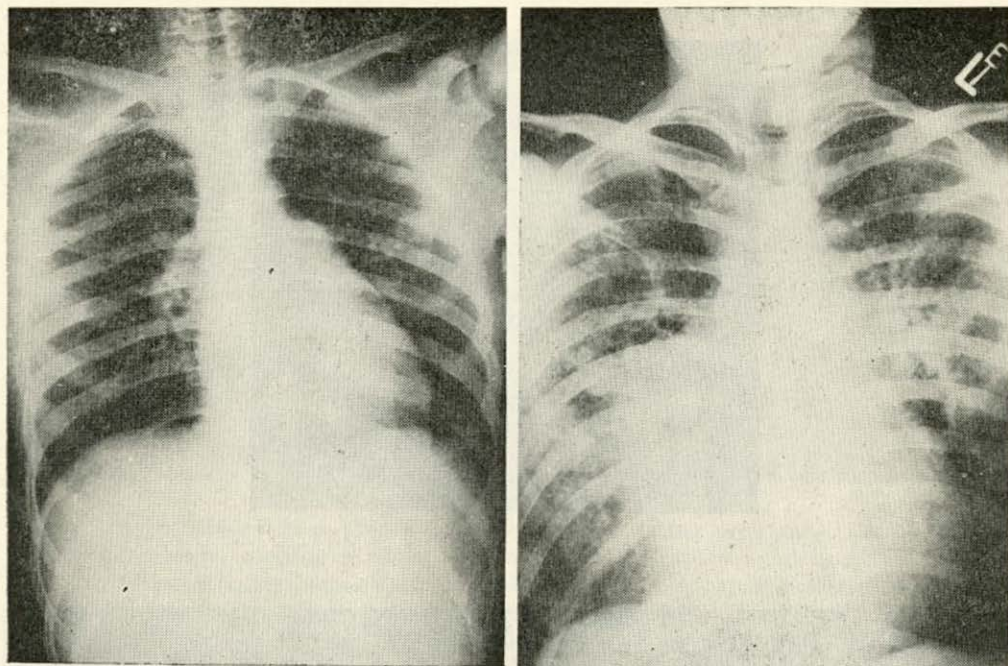


Figure 19.—(Cont'd) C. X-ray on the third hospital day, showing scattered infiltrations in midthird of both lungs. D. X-ray on the seventeenth hospital day, showing marked increase in the infiltrations in both lungs. (Autopsy disclosed deep blue-red hemorrhagic lungs; marked perivascular and peribronchiolar infiltration of plasma cells with many such cells in the alveolar walls and lumens. Courtesy Drs. M. Finland, L. E. Jolliffe and F. Parker, Jr.: *Pneumonia and Erythema Multiforme Exudativum*. *Am. J. Med.*, Vol. 4.)

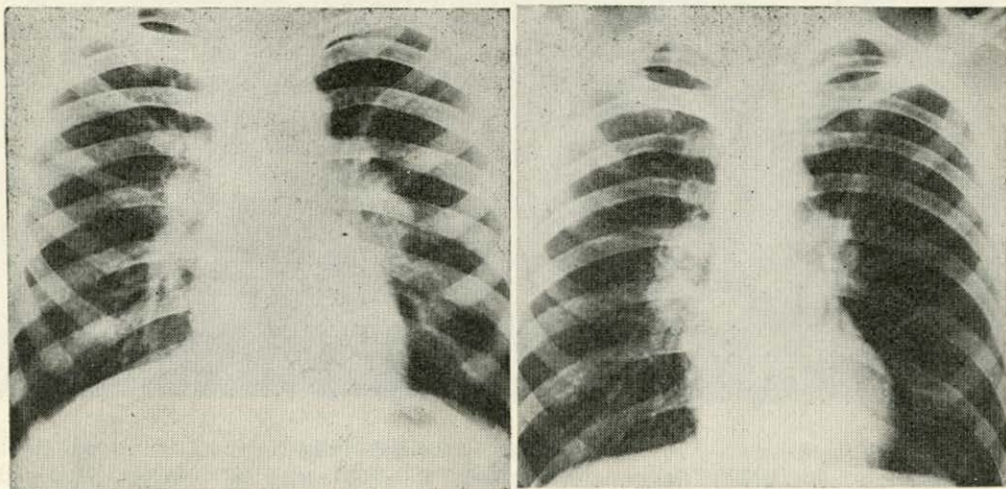


Figure 20.—A. Chest x-ray findings in a boy of 10 with erythema nodosum. Prominent hilar densities, more marked on left; increased bronchovascular markings. B. Chest x-ray findings in a man of 21 with erythema nodosum. Prominent hilar densities; accentuated bronchovascular markings.

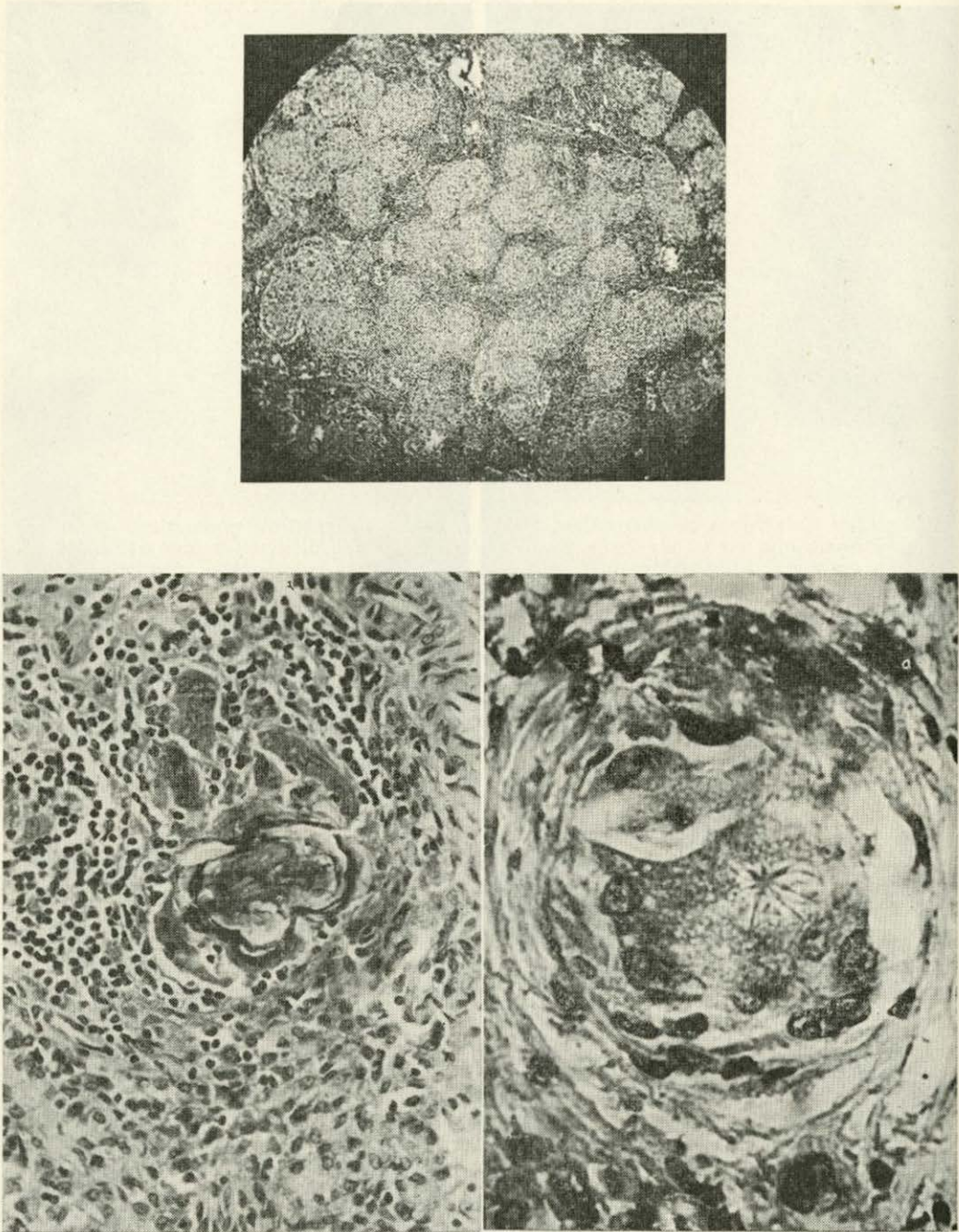


Figure 21.—Sarcoidosis. A. Noncaseating, epithelioid tubercles with scattered giant cells. B. Stratified, "Schaumann corpuscle" in a ruptured giant cell. C. Asteroid body.

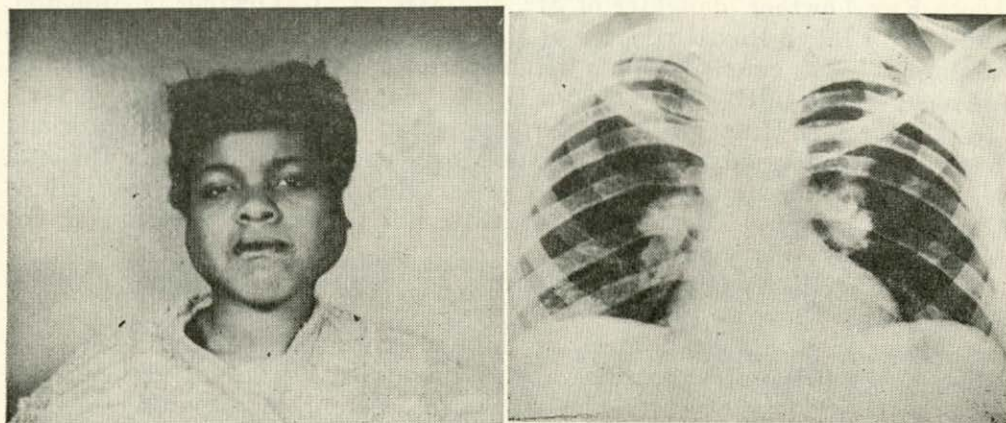


Figure 22.—Sarcoidosis in a woman of 21 discovered during pregnancy. A. Enlarged parotid glands; swelling of right lacrymal gland (Mikulicz syndrome). B. Chest x-ray of same patient shows hilar form of sardoidosis (biopsy of breast tissue nodule, also of skin consistent with sarcoidosis; stillbirth at term).

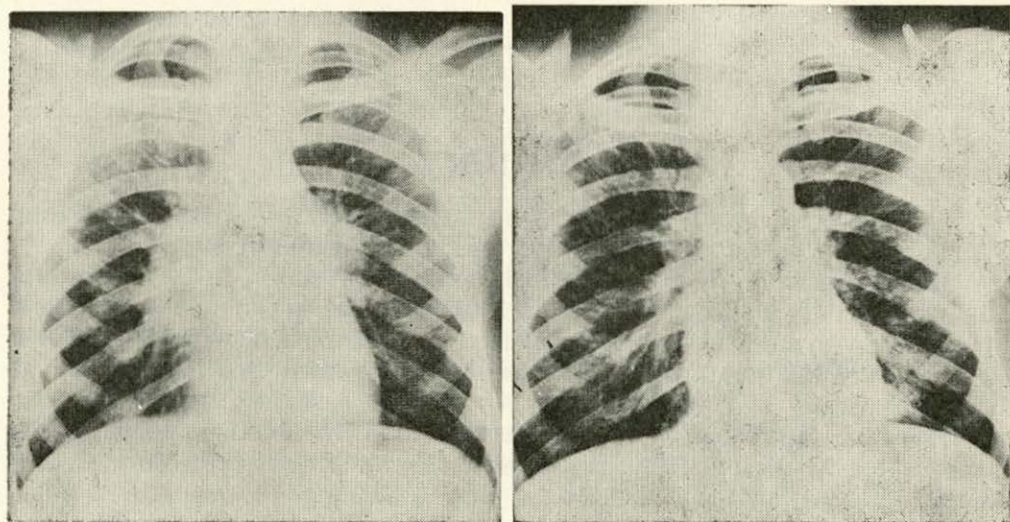


Figure 23.—Sarcoidosis (transitional form) in a man of 19. A. Bilateral hilar lymph node enlargement, more marked on right, with reticular infiltrations extending into adjacent lung. B. Ten months later, marked regression in size of lymph nodes and clearing of both lung fields. (Biopsy of lymph node consistent with sarcoidosis).

Personal Interest Notes

The marriage took place at Moncton, N. B. on September 19th of Miss Leota Kay Lowther, daughter of Mr. and Mrs. W. L. Lowther of Moncton, and Doctor Lloyd Roy Hirtle, son of Mrs. M. A. Hirtle and the late Mr. Hirtle of Halifax. The couple left on a wedding trip to the New England States and are now residing in Halifax. Doctor Hirtle graduated from Dalhousie in 1949.

Doctor J. E. Hiltz, medical superintendent of the Nova Scotia Sanatorium, Kentville, was formally admitted to the Most Venerable Order of the Hospital of St. John of Jerusalem in the rank of serving brother at an investiture at Government House, Ottawa, by the Governor General, Rt. Hon. Vincent Massey, early this month.

Doctor J. R. VanHorne of Shelburne, has returned after taking a course at the Lahey Clinic in Boston.

Major R. M. Caldwell, M.D., of Yarmouth, was presented with the Canadian Forces Decoration for long and distinguished service in the Canadian Army at a parade of the 14th Field Regiment, R.C.A., in Yarmouth in September.

The marriage was celebrated at Kennetcook, Hants County, on September 12th, of Miss Madeleine Joan Anthony, daughter of Mr. and Mrs. M. G. Anthony, Kennetcook, and Doctor Donald Ross MacInnis, son of Doctor and Mrs. D. F. MacInnis of Shubenacadie. Doctor MacInnis graduated from Dalhousie in 1949.

A. G. Nutlay, M.D., D.D.S., of Halifax, was honoured with a Fellowship in the American College of Dentists at the Convocation held recently in the Cleveland Hotel, Cleveland, Ohio.

Obituary

The death occurred at Reserve on October 31st of Doctor Cecil John Sparrow, at the age of eighty-one after an illness of three weeks.

Doctor Sparrow was born in St. Catherines, Ontario in 1872. He graduated from Trinity College, Toronto, in 1901 and went to Cape Breton in 1904, practising in Sydney for ten years before the outbreak of World War One. He went overseas with a medical unit and on his return took up residence at Reserve.

Five years ago Doctor Sparrow was honoured by a banquet given by the Cape Breton Medical Society in Sydney for completing his fiftieth year as a doctor.

He is survived by his wife, the former Helen Josephine Tobin of Sydney, four sons and three daughters.

The Bulletin extends sympathy to Doctor E. P. Nonamaker of Halifax on the death of his father, Rev. E. V. Nonamaker, which occurred at Bridgewater on October 11th, at the age of sixty-eight.