THE NOVA SCOTIA MEDICAL BULLETIN

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After Medicare - What?

The introduction of some form of fairly universal, government - sponsored medical care insurance has been imminent for so long that the events of the last few months were almost an anti-climax. No one knows what the election campaign will bring, but there is clearly a large area of agreement between the major parties, the Hall Commission recommendations, and most provincial governments on Prime Minister Pearson's proposals. Whatever the merits of these or alternative proposals, we must examine realistically the probable situation when most of the population have most of their medical bills paid through some program similar to hospital insurance. The anniversary of Confederation in 1967 has been suggested as the date when such a program will be operating.

An increased demand for service will undoubtedly result. The Hall Commission cites the Manitoba Medical Service experience as evidence that this demand will develop gradually, and permit the supply of physicians to increase to keep pace. The medical profession and medical educators are not convinced, and in the Atlantic Provinces the short physician supply in many areas is a cause for serious concern. No doubt at best there will be a real limit on medical services imposed by the available time of physicians, and both doctors and patients will have to develop some method of giving priority to those with obvious serious illness. Experience elsewhere suggests this will not drastically change the present distribution of medi-

cal services at once, and that, apart from obvious emergencies, population groups that have always sought and received relatively more care will continue to do so. Likewise other groups will probably continue to seek and receive less. Probably all groups will have to wait longer to receive service, but having to wait for attention in the doctor's office or hospital is already a widely-heard complaint in many parts of the country.

Government sponsored insurance on a national scale will probably tend to crystallize patterns of medical care organization. The British National Health Insurance in 1911 tended to perpetuate the panel system of practice for general practitioners, with payment by capitation somewhat similar to our Cape Breton check-off system, that had been common in private and industrial practices before the law was passed. The National Health Service in 1948 has crystallized a separation of hospital, general practitioner and public health services that had been developing for decades. Change is difficult when it requires unanimous consent of several levels of government, as well as the co-operation of various groups of medical specialists or general practitioners, and of groups of hospital and health administrators.

Are there patterns of medical practice or health organization that have developed under our system of private practice plus limited voluntary, commercial and government insurance or welfare medical care programs, that we would rather not have made part of the almost unchangeable medical care organization of Canada in the future? Asking the same question more positively, are there features of medical practice consistent with the Prime Minister's conditions that we very much wish to include in the medical care pattern of the future, even though we may not have achieved them fully under present conditions of practice? Three such features occur to us as deserving a high priority.

The first is to relate each person, well or ill, to a personal physician who will maintain his health as well as treat him when sick. Any survey of the public today reveals that many people in some communities most people - do not really have such a personal physician. Our fee schedules have rewarded the skilled technician who performs an operation or procedure so much better than a personal health counsellor, that the medical profession must accept responsibility for this situation. Can we change it before we have a national health plan? Is it realistic to expect a doctor, whether a general practitioner, internist or pediatrician, to have an intimate knowledge of the health of about two to three thousand people, since many of the other specialties could not perform this function.

Second, what pattern of services must we develop to bring to the physicians office for care, both the preclinical or early stages of illness (such as the obese man before his coronary or the woman with cancer in situ) and to keep under his continuing supervision the chronic hypertensive or diabetic? With much busier physicians, how can these people be sought out and brought under care? Studies by the Commission on Chronic Illness in the United States suggest early detection and continuity of care for most chronic illness has not been achieved under our present system of medical practice. It would be impossible to offer a thorough medical examination to every person over 40 in Canada annually with or without health insurance. Health departments, voluntary agencies, and hospital out-patient departments must collaborate with the practising physician in some organized program for early detection of chronic illness, and for keeping the chronically ill patient under the continuing care of his personal physician.

This brings us to our third point. What services now performed by doctors could be carried out adequately by non-medical personnel? Such a pattern of division of labour must be a part of the co-ordination of the activities of health departments, voluntary agencies, and hospital outpatient departments with the work of the private physician. We cannot afford to have physicians spend their time on procedures that could be done by technicians, nurses, or even secretaries. In any profession or vocation this kind of change is most difficult to accept or even contemplate. The answer probably lies in various forms of team work.

The Royal Commission on Health Services in Canada, and demonstrations elsewhere, have suggested that several new patterns of health care organization can provide the new health teams that will make some of these changes possible. Multiple screening clinics are being tested, in which a battery of presumptive tests performed largely by technicians are offered to population groups. Positives are referred to their personal physician, either for the first time with this suspected finding, or referred back to him with a chronic condition of which the doctor knew but for which the patient may no longer be under care.

Home care programs can be another such device, providing many nursing, physiotherapy, housekeeping and home visiting services that enable non-medical personnel to keep the doctor in touch with patients whose homes he need visit much less often. Group practice has also been suggested, as a means of speeding up consultation, and also of making out-patient diagnostic and therapeutic procedures more readily available to the busy physician, with technicians, nurses and secretaries he could not employ alone relieving him of unnecessary burdens.

Our profession may have relatively little time in which to evaluate these and other suggestions, and try to organize the assistance we will need to meet the anticipated new demands for care. Would it not be wise for the medical society, in co-operation with the health department, voluntary agencies and hospitals, to test some of these new programs on a pilot basis, with research grant support, before 1967?

FORTY YEARS AGO

From the Nova Scotia Medical Bulletin October 1925

Four doctors have been nominated to contest Federal seats in the election now under way. These are Dr. A. N. Chisholm, Port Hawkesbury, for Inverness; Dr. L. W. Johnstone, Sydney Mines, for North Cape Breton and Victoria; Dr. John A. MacDonald, St. Peters for Cape Breton West and Richmond; Dr. L. J. Lovett, Bear River for Digby-Annapolis. Doctors Chisholm and Lovett were members of the last house.

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Diagnosis and Treatment of Bacterial Pneumonias

Despite antimicrobials effective against almost all pulmonary pathogens, bacterial pneumonia has a high morbidity and mortality. Complications and problems of treatment are discussed.

Infections of the lung have come to be considered examples of diseases conquered by chemotherapy. There is no doubt that antibiotics have exerted a dramatic effect on the course and outcome of bacterial pneumonias, but this group of diseases continues to rank high as a major cause of morbidity and death. This is related in part to the changing ecology of these infections which were formerly common among young relatively healthy individuals, but are now found primarily among aged, debilitated patients with chronic disease.

Furthermore, antibiotics themselves contributed to the change in the clinical picture of pneumonia and have created problems in their use. Some of the features which have come to life regarding the diagnosis, course, and treatment of bacterial pneumonias are the following:

(1) The etiologic agent frequently is missed on Gram smears of sputum; (2) the appropriate organism is not suspected; (3) there is delay in recognizing superinfection; (4) the systemic complications, particularly meningitis, are overlooked; (5) antibiotics are not properly used; (6) alterations in flora of the sputum in patients receiving antibiotics are not appreciated; and (7) the propensity of nonbacterial complications of pneumonia to produce fever is not well known. These problems will be discussed.

Staphylococcal Pneumonia

Staphylococcal pneumonia may occur under a variety of circumstances such as a sequel to viral influenza, a manifestation of hematogenous staphylococcal disease, and a complication of structural disease of the lung.

Pneumonia associated with influenza occurs in individuals of all age groups, but patients with pregnancy, valvular heart disease, and chronic lung disease appear to be particularly prone to development of this fulminating infection. The clinical picture is abrupt in onset, progresses rapidly with marked dyspnea, cyanosis, scant and

bloody sputum, and evidence of alveolarcapillary block. The virus may be more important than the staphylococcus, but treatment with penicillinase-resistant penicillins is imperative.

Hematogenously disseminated staphylococcal infection has been noted frequently among narcotic addicts with septic thrombophlebitis. Patients suspected of having staphylococcal disease should be treated with penicillinase-resistant penicillins until results of cultures and sensitivities are available. If the organism is sensitive to penicillin G, therapy should be changed to this drug.

Certain X-ray findings should raise the suspicion of staphylococcal disease. These include the development of pneumatocoeles, the occurrence of spontaneous pneumothorax; rapidly changing infiltrate with parafocal emphysema; and early loculation of pleural exudate. These manifestations of staphylococcal pneumonia are becoming increasingly common in infants and young children or patients with mucoviscidosis, postoperative states, and superinfections after broad-spectrum antibiotic therapy. Early diagnosis of staphylococcal pneumonia, followed by appropriate drug therapy, may avert mortality.

Gram-Negative Pneumonias

The incidence and severity of infections due to gram-negative pathogens other than the staphylococcus appear to be increasing, particularly in hospitalized patients whose normal bronehial flora is altered by antibiotics. Furthermore, the use of antibiotics per se may have increased the prevalence of these bacteria in the hospital. These pathogens are usually seen as superinfections but may produce primary pneumonia. The organisms include Hemophilus influenza, Escherichia coli, Klebsiella-Aerobacter, Proteus, and Pseudomonas.

H. influenza is frequently found in the sputum of patients with chronic lung disease and may be of etiologic significance in patients with chronic continued on page 252

Jonas A. Shulman, M.D.; Leon A. Phillips, M.D.; and Robert G. Petersdorf, M.D., Annals of Internal Medicine, January, 1965.

¹Reprinted from the Abstracts of the National Tuberculosis Association, June, 1965. Printed through cooperation Nova Scotia Tuberculosis Association.



Dalhousie Notes

VII. CONTINUING MEDICAL EDUCATION

LEA C. STEEVES, M.D.1

Halifax, N. S.

Continuing medical education is the term now in popular use to indicate the part-time learning process used by the practising doctor in his attempts to keep abreast of new developments in Medicine. Because different persons learn in different ways, several forms of continuing medical education exist and in fact any one doctor usually applies several of them in the course of the year. The Medical Schools, with their libraries, their teachers and research workers, having equipped the practising doctor with his stock of basic knowledge and skills during his undergraduate years, are the logical partners of the doctor in this process of life long learning. This is an account of the development of the Postgraduate Division of the Faculty of Medicine at Dalhousie University and the services it provides on behalf of the Faculty in cooperation with organized Medicine and the practitioners of Canada's Atlantic provinces.

Geographic and socio-economic factors have always conspired to make continuing medical education difficult to obtain in the Atlantic area. Our population of 2,000,000 resides in 52% of instances in small towns or in rural areas scattered over 95,000 sq. miles of land made difficult to traverse by much intervening water. The result has been that our doctors are faced with much time-consuming travel in the course of caring for larger than average practices while at the same time being forced to work in relative isolation. While new and better roads are allowing more efficient practice as more patients come to the office rather than depending on house calls, relative overwork and isolation continues to render difficult the achievement of continuing medical education for the practitioner in the Atlantic area. One beneficial result of this circumstance however seems to be the stimulation of interest in continuing medical education and an appreciation of opportunities made available by the University.

Since 1922, the Dalhousie Refresher Course has provided all practitioners who could come to Halifax with a programme of Guest speakers and Faculty presenting reviews and recent advances in a wide range of subjects. In recent years, registration has been approximately 265 with, however, fewer and fewer attending from outside Nova Scotia. Soon after World War II concluded, the Provincial Medical Board of Nova Scotia offered to provide the John Stewart Memorial lecture, an important feature of the Refresher Course since that time.

The first expansion in continuing medical education at Dalhousie after the establishment of the Refresher Course came during the depression years prior to World War II when the Hon. Mr. Ray Lawson provided support for an annual review course in Anatomy for those doctors doing the essential surgery in the smaller towns. Pressures on the Faculty during World War II resulted in this course being dropped. The fate of this course illustrates that outside sources of funds and adequate numbers of teachers together with a need for the course must all be simultaneously present.

Considering patterns of practice in the Atlantic area, the logical step of taking teachers to learners in their own communities remained to be considered. The late Dean H. G. Grant, stimulated by knowledge of the Bingham Associates programme in Maine, appointed a Committee to study the feasibility and desirability of developing a comprehensive programme of continuing Dalhousie. This committee's education at report was adopted by Faculty and subsequently accepted by the Board of Governors of the University, providing operating funds could be obtained.

Director of Post Graduate Division, Faculty of Medicine, Dalhousie University.

Supported by a grant of \$50,000 from the W. K. Kellogg Foundation, the Dalhousie Postgraduate Committee was constituted in 1951. The committee's initial effort was a series of Short Courses in Halifax augmenting the Dalhousie Refresher Course by the presentation in depth of specific topics for small groups. This was soon followed by the development of an off-campus series of lectures and discussion periods arranged in cooperation with the Lunenburg-Queens Medieal Society in 1953. Over the subsequent twelve years, the off-campus regional course evolved into a series of six consecutive meetings each year dealing with medicine, surgery, obstetrics, paediatrics, a medical specialty, and a surgical specialty. Topics are chosen in consultation between a community hospital programme committee and a member of the Postgraduate Division. communities cooperate to permit an economy of teacher time and travel expenses. Courses are provided in all four Atlantic provinces, and in the academic year just concluding numbered twentysix. To an increasing degree, the Regional Course teaching sessions resemble a University teaching hospital clinical conference with case presentations by the local doctors being elaborated on both by the hospital staff and the visiting teacher. The exchange of knowledge which results not only brings to the practising doctors the latest developments at the Faculty of Medicine but also brings the teacher up to date on the rapidly improving facilities for hospital practice throughout the Atlantic area and so improves the relevance of his teaching of undergraduate medical students.

While the Regional Courses are considered to be most desirable educationally because of the high level of participation by local practitioners, other off-campus programmes are conducted, in every instance co-sponsored by a Provincial medical society, a Chapter of the College of General Practice of Canada, or a similar body. These are most commonly a single clinical day but may also be three day refresher courses.

On campus, the Dalhousie Refresher Course supplemented by Short Courses in depth in Anaesthesia, Psychiatry, Medicine, Surgery, Obstetrics, and Paediatrics and a Clinical Day in Cancer are presented each year. Increasing interest is being shown by individual doctors in a "Clinical Traineeship" of two weeks or more full-time, individualized continuing medical education under the supervision of an appointed tutor.

During the academic year 1964-65, 175 events were presented on-campus with 3,947 attendances, while 322 events were conducted off-campus with

6,226 attendances.

While a W. K. Kellogg grant made it possible for the University to embark on these expanded contributions to continuing medical education, the foundation's policy is one of initiating worthy projects in expectation that once their value has been demonstrated, support from other sources will be forthcoming. The Medical Societies of the four Atlantic provinces agreed to provide such support starting in 1955 and have gradually increased their contributions until they now amount to \$10 per member per year. The contributions of the Canadian Medical Association to each of those four provincial medical societies for the purpose of continuing medical education is transferred by them to the Postgraduate Division of the Faculty of Medicine. In addition, the College of General Practice of Canada from its Wyeth Grant contributes toward our operating expenses. When these contributions from organized medicine are added to the tuition fees of course registrants, we find the medical profession itself contributing approximately 50% of the costs of this University programme of continuing medical education. An important source of additional funds is the voluntary health agencies; in particular, the Canadian Heart Foundation, the Canadian Cancer Society, and the Canadian Arthritis and Rheumatism Society. Valuable contributions to specific events are made by many other agencies and individuals. Residual expenses, which are not insignificant, and include the provision of a wide variety of services, are absorbed by the University itself.

The Dalhousie programme of off-campus continuing medical education was the second to develop in Canada and has emphasized particularly the close cooperation between the learner and the teacher in the planning, financing, and conducting of courses. This approach has evoked widespread interest throughout North America and beyond.

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Hot and Cold History

RECENT AND REMOTE EVENTS IN THE HISTORY OF SCIENCE AND MEDICINE

LLOYD G. STEVENSON, B.A., M.D., Ph.D.²

New Haven, Connecticut.

This morning's record of vesterday's election is hot news. The election may also be considered to be hot history. After all, it occurred vesterday: it therefore belongs to the past. "What's past is prologue." And history is the prologue of the seething present.

Last November's election in the United States may have been no great surprise to anybody. The outcome had been clearly foretold, in a score of polls and by a hundred newspaper, radio and television pundits. Perhaps the time cometh and is not far off when history may be written before it happens. This will be a sort of superheated history, a steamy vapor of statistics, forecast rather than recall, a reminiscence of the future. The reporter then will give way to the preporter, annals will be supplanted by prophecies, print will yield to the "print-out," and history, poor galled jade, will be whipped to a Gallup.

Whether history is a relation of incidents (that is to say, a narrative) or a discipline (a branch of knowledge) it may be hot or cold. Whether it is a series of particular events or the whole train of past events connected with a particular country, society, institution or civilization - even if it is the aggregate of past events in general, the course of human affairs or the "story of civilization" - still it may be regarded as hot or cold. For the narrative may deal with Babylonia, or America, the discipline may be ancient, medieval or modern in focus; the series of particular events may be close to our own time or very remote from it; the country, society, institution or civilization described may be near or far in the time scale; and the broad sweep of human affairs may be thought to take on significance early or late.

One definition of hot history might discover it in the pages of the New York Times. On Wednesday, October 28th, 1964, on p. 38C, the Times printed an interview with the famous Nobel laureate, Dr. I. I. Rabi, on the occasion of his appointment as the first University Professor at Columbia University, his writ to run henceforth from boundary to boundary of academic affairs, having no regard for departmental barriers. As a University Professor, Dr. Rabi will attempt to throw a bridge between the "Two Cultures." bothers him." the interviewer reported (while from the next column a laureate of port serene and eve unbothered looked cheerfully at the reader) "that, while political history is recorded 'blow by blow,' there are 'no really great historians' of science to record the present revolution in jargonless prose."

Here, then, is an appeal for more hot history, an appeal which issues, curiously enough, from a great institution which has pioneered in contemporary or current history far more than most other universities. Columbia, has, in fact, recently issued a catalogue of its Oral History Research Office, listing interviews with 1,345 persons who, so the rubric runs, "have led signifieant lives." They range from Frances Perkins. New Deal Secretary of Labor, to Samuel J. Battle, the first Negro policeman in Manhattan. Miss Perkins was interviewed for 212 two-hour sessions over a period of several years and the typed transcript extends to 5,566 pages. Mr. Battle's terse, 60-page story reports his professional trials and troubles beginning in 1911. A Manhattan policeman of that era had to be on his toes and prepared at any moment to dodge "Irish confetti" bricks hurled from rooftops. It may be added, demonstrating how history moves in cycles, that a white policeman in Harlem was very nearly killed not long ago by a rain of similar confetti - not, however, attributable to the Irish.

Prominent persons in science, business, the arts, government, law, medicine and labor have sat before tape recorder microphones, responding to questions or freely reminiscing about their contemporaries, about their work, about their struggles and triumphs and defeats. The collection of the Oral History Research Office, established in 1948, now totals more than 200,000 typewritten pages and about 20,000 pages are added each year. Scholars have access to about 60 percent of the memoirs. The remainder are closed, usually until after the subject's death. This newest among the varieties of archives was designed to fill the gap in source materials created by the decline of letterwriting and diary-keeping.

Professor Rabi is not satisfied. Science has

The John Stewart Memorial Lecture presented at the 38th Dalhousie Refresher Course, November 4th, 1964. ²Professor of the History of Science and Medicine, Yale University.

not had, perhaps, its fair share of these recordings; or possibly such memoirs, many of which are stored away according to plan, do not as yet meet the requirement. A narrative history, in jargonless prose, is still awaited.

Columbia University is by no means alone in its effort to gather the materials for current history. Although such materials are seldom served up hot (conversations with Mr. Justice Frankfurter form one of the exceptions) vast supplies are being stored for future use. No end is in sight. On Saturday morning, May 2nd, 1964, Frank A. Taylor, Director, United States National Museum, speaking in the Museum of History and Technology at the Smithsonian Institution, declared that "hot history is the most chilling activity in the future of the history of science."

I know that he said this because, as a conscientious (though old-fashioned, non-electronic) historian, I was sitting in the front row of his audience with a ten-cent notebook and a thirty-nine-cent ballpoint pen and I wrote it down at once.

I would not want to put the speaker on that occasion in a false position, or to misrepresent the meaning of his words. So far as I recall, he expressed no firm opinion on the utility of history-ontape. In referring to this trend as a "chilling activity" I think he meant to refer only to its enormous scope and to the bottomless demand. I know that he told us of the receipt of many thousands of proposals and project reports in this general category. How many dealt with tape, how many with punch cards and how many with other techniques I cannot say, but all were concerned with the hot history of science and technology, with the record of the revolution through which we are now living and which is transforming all our lives.

These remarks were recorded (or at any rate taken down) at one of the sessions of the annual meeting of the American Association for the History of Medicine. Another session, one day earlier, had been devoted to a symposium on "The Federal Government and Health Research, 1900-1960," with Dr. George Rosen, Dr. James H. Cassedy, Dr. Jeanne L. Brand and Dr. A. Hunter Dupree as speakers. Dr. James A. Shannon, Director, National Institutes of Health, was the discussant, and the Surgeon-General, U.S.P.H.S., was also present. A large audience (large by the standards of the American Association for the History of Medicine) listened with close attention. I observed a couple of Renaissance scholars conferring together in the back row, and a timid classicist hovered near the door. I had the impression that these three, at least, found the air-conditioned Clinical Center Auditorium of the National Institutes of Health a trifle too "hot" for comfort.

In 1956, Geoffrey Barraclough, sometime Professor of Medieval History at the University of Liverpool, who succeeded Arnold Toynbee as Research Professor of International History at the University of London, published a volume of essays entitled History in a Changing World. Although half a dozen of these essays actually dealt, a little oddly in their context, with the Western European Middle Ages, the general thesis was that Western Europe doesn't matter much any more, that it is headed for "something not unlike the colonial status which in the eighteenth and nineteenth centuries it imposed on Africa, much of Asia and the New World."

Professor Pieter Geyl, savagely dissenting from this view, summed it up as follows: "The traditional Europe - the Europe of our history books, the Europe of Louis XIV and Napoleon and Bismarck - is dead and beyond resurrection. and we may disabuse our minds of the illusion that there is any special relevance, from the point of view of contemporary affairs, in studying these neolithic figures." The grounds of Geyl's dissent I shall at present pass over. They may be found in his Encounters in History. My point here is how one distinguished historian, Barraclough, has made it evident that in his view history, to be really hot, must deal with the great power centers of the contemporary world, with the United States and Russia. His criterion is not whether events are recent or remote but where they took place. His life (I am paraphrasing Geyl) was misspent in the study of the machinery of the papal chancery in the thirteenth and fourteenth centuries; he should have studied the Piasts, the Przemyslids and the Ruriks - in other words the history of Eastern Europe.

Barraclough wrote in 1956, Geyl in 1957. It might now be suggested that in order to keep ahead of the game the budding political historian ought to devote himself to medieval China.

Since science and medicine appear to extend day by day the scope of their power and influence in modern society, historians of science and medicine have a hot property on their hands. Unlike Professor Barraclough, they have backed the right horses. It may turn out, of course, that they are unwise to scatter their attention over the field of Western Europe. American science, Russian science and Chinese science ought possibly to preempt it all. Dr. Joseph Needham, who is opening up the treasures of ancient Chinese science and medicine, may come to be regarded not only as one of the most venturesome and interesting of historians (there can be doubt that this is so) but also as one of the "hottest."

Admitting that medicine and science, even the medicine and science of Western Europe, provide a field of historical study likely to be rewarding, we must still determine what periods are worth our dedicated efforts. It is said that more scientists are living today than in all past ages put

together. Should we stick with the majority? Should we keep our history up-to-date, "scientific" and hot?

At this point I want to tell you, in a very few words, of some of the recent work of one of my colleagues at Yale, Dr. Bernard Goldstein. Goldstein is an Arabist and a Hebraist. Like Barraclough, he is a medievalist. What could be colder, from the viewpoint of its relevance to modern science, than the eleventh-century Arabic manuscript which now lies upon his desk? (In fact it is a microfilm of a manuscript preserved in the Escorial.) And yet, though this document records observations made in 1006, two generations before the Norman Conquest of England, it is as hot as the latest scientific journal, for these observations record the occurrence of what may possibly prove to be the largest supernova on record. Astronomers in Argentina are studying through their telescopes what are probably the remnants of this stupendous astral explosion.

Astronomy is of course a peculiar science. No reliable observation, whether recorded in ancient Babylon or still to be recorded on Mount Kobau, but is or will be grist to its mill. Planetary theory must take account of all the facts of planetary behaviour at all times. When Simon Newcomb, in the last century, worked out the lunar theory which is still the fundamental basis of present-day calculations and which contributes to moon-shot technology, he used records dating from before the time of Ptolemy to the nineteenth century.

It is hard to imagine that twentieth-century physicians will ever react as enthusiastically as twentieth-century astronomers to the discoveries of the manuscript detectives, or for that matter to any of the discoveries of medical historians. No scientist, in fact, whose workshop is smaller than the universe is likely to find fundamental substantive data in ancient records.

The literature of medicine is enormous, and now and again something turns up in the older writings which may have practical importance in our own day - one of the collyria of Pliny for example. But this would seldom reward the search, nor would any such expectation justify it.

The physicist, Rabi, in the newspaper interview already cited, declared that "Science is a great game. It is inspiring and refreshing. The playing field is the universe itself." History, too, is a great game, a game of endless challenge and difficulty. The playing field is the universe of mankind, in every age and in all the varieties of circumstance. The history of science, then, combines two of the greatest games ever invented. The science of biology is the natural history of life, and medicine is its work force in the human sphere, so that medical history, however much dust it may stir up in the archives, plays its game in an arena of life and movement, of agony and struggle, of joy

and achievement, of birth, development, disease and death. It is a part also of the history of ideas. If we know how ideas have changed and evolved, if we can detect the motivations and the hidden presuppositions, culturally determined, in times sufficiently remote from our own to be viewed with candour, with detachment, and so far as possible with objective realism, perhaps we shall learn to see more clearly the complexities of our own and related cultures today, to spot the presuppositions, to understand the continuing prejudices, to detect the developing patterns.

Many will recall the story, told in this connection by Dr. Oliver Wendell Holmes, of the Arctic expedition proceeding toward the North Pole at the rate of ten miles per day while the ice underfoot drifted away from the Pole at the rate of twelve miles per day. Had the explorers not looked up and around, had they not taken their bearings and determined their situation from day to day and hour to hour, they would never have known that they were retreating from the Pole by two miles every day. The implication is, of course, that history will provide us with adequate bearings. The better the history, one assumes, the better will be the calculations.

Can it be done? I confess that I find it doubtful how much can be achieved in this way. The greatest practitioners of the arts of political and social history are increasingly modest, it seems to me, in putting forward any such claims. Yet at the same time the study of science, what it is, how it works, its reaction to cultural forces and its impact on society, the selection and education of its practitioners, the control of its influence through the technological apparatus of our civilization, all this in the interest of intelligent planning and support - has given rise to a congeries of secondorder disciplines, derived from philosophy, sociology, economics and political science as well as from history, which show some tendency to coalesce. The consequence is what many now like to refer to as "the science of science," in which the methods of science itself are hopefully applied to these important problems in conjunction with methods long practised in several branches of the humanities. An institute for this new discipline already exists.

Whether "the science of science" ever deserves to be called a science remains to be seen. I wish it well, for the ends it hopes to achieve, the "operations research" it hopes to carry out, may help to increase the rational element in decisions which will somehow be made, as made they must be.

It is at this point that history, growing hotter day by day, achieves the vaporization point. The Future as History is the title of a very interesting, thoughtful, and not altogether discouraging book by Robert L. Heilbroner. As Greek prognosis was more than forecasting, since it embraced future, present and past, so history is now more than backcasting and embraces past, present and future. You may recall that the White Queen said to Alice, "It's a poor sort of

memory that only works backwards.'

It is well to look ahead, fatal to look forever back. And yet the scientist of science, if such there be, like the University Professor whose assignment is to cover the waterfront, is staking out an enormous territory. This territory he proposes to exploit by a few, as yet, comparatively simple techniques. The use of graph theory and matrix methods to study citation networks is a procedure of real interest and promise and it is only one of several new weapons. Like the others, however, it is a popgun in a wilderness. Enough such weapons, with adequate strategy to direct them, may nevertheless open a new frontier. In July 1965 the United States Navy is to conduct its second congress in this new discipline. The literature grows apace.

Professor Derek Price has assured us, it is true, that "there is as little hope for the finding of a prescription for the organization of science on a national scale as there is for the production of scientific advance itself." We are not, it seems, to look to the "science of science" for a bureaucrat's administration handbook, any more than we are to look to it for the Kama Sutra of discovery-making. All the same, its proposals are

modestly immodest.

Where, in all this, is the historian? He is part of the army which approaches this new frontier marching shoulder to shoulder with the other humanities and social sciences, all of them enrolled under the banner with the strange device. It is not even clear what his rank in the new force will be.

Nevertheless, and whether he likes it or not, he will be there. If the "science of science" should fail to materialize, even then the historian will be called upon. Planners of one sort or another will demand his presence. However modest, however relativist, however pessimistic he may be, he will not be let off. Presidents and Prime Ministers will insist on reading history so long as they are able to read anything at all beyond the business of the moment. What are called "working papers" will include "background material," a sort of history-hamburg for quick nourishment. And hamburgers, of course, must be served up hot.

It now behooves us to ask whether it is true that hot history, the record and interpretation of recent events, is what is most needed. And the answer, clearly, is yes, so long as short-term considerations are in question. The authors of the recent special supplement on health insurance of the Canadian Medical Association Journal would no doubt be interested to learn a great deal more than any of us now knows of the duties of a muni-

cipal doctor in Greek antiquity; but it would hardly occur to them, or to me, that such information might be vital to their immediate task. Almont Lindsey's Socialized Medicine in England and Wales, on the other hand, a reasonably hot review of relevant experience, would almost certainly strike them as material to their duties.

Even so, I am inclined to think that these admirable reports, thoughtful, laborious and enlightened as they are - so much so that they appear to belong to a different historical era than the lucubrations of the American Medical Association - have not reached out far enough, though extending even unto Australasia, nor far enough back in time. It may be, of course, that I see as inevitable the extension of established patterns, the extrapolation of existing curves, which in point of fact need follow no preordained course. From Isiah Berlin to Robert Heilbroner, the "inevitability of history" has recently "taken a licking". If history is to be of any use, however, in the practical political and social concerns of men, then such tendencies must be taken into account. Some of the propositions in the C.M.A.J. supplement seem to me to have been made in a historical vacuum.

When Henry Sigerist, many years ago, undertook to advise the government of Saskatchewan on its plans for the introduction of hospitalization insurance - an innovation of some historic importance - he revealed himself as more than a historian. In the Institute of the History of Medicine in Baltimore, he set up a separate office for Saskatchewan's affairs. In one office he functioned as historian, in the other as medical sociologist and politician. It was impossible, nevertheless, to keep these two functions quite distinct. "From Bismarck to Beveridge" was the title he gave to an unfinished historical study of the rôle of the state in the allocation and finance of medical services. Was it possible to write about Bismarck without a thought for Douglas? This is the obverse of the question whether Douglas, Diefenbaker and Pearson (and all their provincial counterparts) should formulate their plans without a thought for Bismarck, for the history of social experiment in the medical sphere. It seems to me that Germany's experiments in the last century are still hot today.

The temperature of any historical theme or thesis is not determined altogether by the time factor. Arthur M. Schlesinger, Jr., writing books about Franklin D. Roosevelt, is the same Arthur M. Schlesinger, Jr. who worked for John F. Kennedy in Washington. What is more, he is the same Arthur M. Schlesinger, Jr. who won a Pulitzer Prize with a famous book about Andrew Jackson. Other heroes have emerged from the West since President Jackson, the first truly democratic President of the United States, but in a real and vital sense Old Hickory continues to be hot.

In the Department of the History of Science and Medicine at Yale, a fully qualified psychoanalyst will be devoting all his time for the next two years to a study of some of the intellectual antecedents of the work of Sigmund Freud in one or more of its aspects. I have been told that Freud is too close to contemporary thought and practice, too intimately a part of the nineteen sixties, after more than half a century still too controversial, for cool, objective assessment in the manner expected of history. I have been told, as well, that no analyst will ever be able to do it.

The last point is a tricky one. I would give very little for a cool, objective assessment of the history of nuclear physics by a nonphysicist. I am aware of the problem but I am also aware that writing about the late Herbert Hoover will not be confined, and cannot be confined, to members of the Democratic Party. Psychoanalysis is too important for history to neglect it, and I am reluctant to think that it is too hot to handle. It is not the lapse of time alone that determines the temperature of a thesis. Theodore Mommsen even contrived to heat up Roman history and give it an aspect of urgency in relation to the contemporary scene. When he wrote about Julius Caesar as "the perfect man," there is good reason to think that his Caesar was Count Bismarck in a toga. question here is one of involvement and bias. Because fervor springs from involvement, and because involvement is often the child of knowledge. we cannot detach ourselves from our themes and should not wish to do so. What we can and must do, if we are to be good historians, is to try to identify our own bias as clearly as we can, to take it into account, to provide against it, as well as to provide for it, and to deal honestly with our readers. In this sublunar and imperfect world we shall never quite succeed. Our success will be very much better in the important task so many historians appear to relish, that of displaying to public view the involvement and bias of their fellow practitioners.

When Wilson G. Smillie published in 1955 his excellent but mistitled book, Public Health: Its Promise for the Future, which is really a chronicle of public health in the United States from 1607 to 1914, he had this to say in his Preface:

"When a man has devoted his entire professional career to a single phase of human advancement, he cannot present the subject objectively. For public health is a service to mankind to which one dedicates his life. Whatever talents he may possess are poured unstintingly into his work. His activities and his ideas are blended with those of his co-workers, and public health becomes to him almost a religious fervor, a form of devotion and a spiritual ideal. Thus, a book of this type cannot be written dispassionately, for it is, in truth, a justification of one's way of life. . .

"I have chosen, arbitrarily, to bring this book to its close with the year 1914. It is quite true that this was the end of an era for America and the beginning of a new world. But the termination date I have selected is . . . fortuitous. . . It so happens that 1914 was the year that I entered the field of public health. No one who has been active in a given social or scientific field is in a position to judge and evaluate the historical worth of the work of his contemporaries, nor to appraise the results of their efforts. His eyes are too close to the page. . ."

Perhaps I have suggested that remote events can be hot and relevant in a bad sense only. This I do not at all believe. Depending on the subject under discussion, it may be necessary to explore a long train of events in order fully to understand a current complexity of thought. In any case, our understanding of whatever we consider to be relevant in the history (let us say) of the nineteenth century depends to a surprising degree on historical studies of the eighteenth, seventeenth and earlier centuries.

Who fully comprehends the background of the history of ideas which led to Darwin's Origin of Species? Nobody, of course, understands it all. But anyone who has read Professor Arthur Lovejoy's The Great Chain of Being, which takes its starting point from a passage in Plato, has proceeded a long way on the right road. What is vastly more important, however, he has learned a great deal about the way in which ideas grow and change and transform themselves. If he is little the wiser in the ways of biological evolution, he is, or might be, wiser in the ways of the evolution of ideas, a matter of even wider import than Darwinism.

In the medical sciences, as in other branches of science, the work on which we build is almost always recent. We may be aware that the pulmonary transit of venous blood was worked out by Ibn an-Nafis, Michael Servetus and Realdus Columbus, but to many this will appear to get us nowhere. It belongs to the same category of knowledge as our awareness that another Columbus discovered America in 1492.

This was not always the case. William Harvey started from a base line of knowledge which had been drawn by Aristotle two thousand years earlier, and he depended very heavily on the fourteen-hundred-year-old observations and theories of Galen. Until the nineteenth century, Hippocrates remained an authority in practical medicine, not merely its far-off precursor.

Even today, a clinician may feel more at home with some of the case histories of Hippocrates than with almost anything written on disease two thousand years later. "The largest part of that history which we commonly call ancient," said Dr. Thomas Arnold of Rugby, "is practically modern, as it

describes society in a stage analagous to that in which it now is, while on the other hand most of what is called modern history is practically ancient, as it relates to a state of things that has passed away." Whether or not this statement is politically valid, it is certainly true that the "modernity" of many ideas is not strictly a function of their location on the time scale. Sometimes, of course, we confer upon them an unhistorical sanction by wresting them out of context, by failing to understand them in their own setting. A thinker who is hailed as reaching modern status "ahead of his time" is often in fact very much the creature of his age. Nevertheless, we are "closer," in a meaningful sense, to the experimental physiology of Galen in the second century than to the largely speculative physiology of Boerhaave in the late seventeenth, even although Boerhaave comes after Harvey, and Galen long before. At the same time the type of explanation which Boerhaave gropingly sought is usually much more like our own than many of the explanations put forward by Galen. One is "modern" in one way, one in another. "Modern," in this connection, means simply "like us."

Why not devote ourselves, then, to the indisputably modern? One difficulty is that we often fail to recognize it. The sorting out of relative importance (and "modern" also means "important") is not as easy as it seems. What occupies attention today may look trivial tomorrow. As Gottschalk remarked, "The Piccini-Gluck controversy of 1777-8 got much more attention than the contemporaneous experiments of Lavoisier from high and low, wise men and fools; and the Diamond Necklace Affair got more than the struggle for Huguenot toleration going on in 1785-7." What seems insignificant today may be exactly what the historians of a future age will want to know. Although Columbia University has the record of many important matters stored away on tape, it is almost certain that it has failed to interview some of the people, and has failed to inquire into some of the events, which the next age will find of surpassing interest.

When Sir William Osler died, his successor as Regius Professor of Medicine at Oxford was Dr. Archibald Garrod. Garrod had a distinguished but more limited reputation. To some contemporaries he seemed well below the standard set by Osler. Ten years earlier he had published a book called Inborn Errors of Metabolism which had made no great stir. A generation passed, and it still seemed, to those who knew it at all, a minor contribution: I have heard Garrod described as a "lightweight." Twenty-five years more, and the Inborn Errors, suddenly resurrected, is reprinted and widely praised, finds its title borrowed, its principles extended, and its place in history assur-

ed; it is proclaimed with confidence to be a classic, the foundation stone of a new medical edifice. It now seems reasonably likely that physicians a generation hence will be at least as much interested in Sir Archibald Garrod as in Sir William Osler, possibly even more so.

If Columbia University's effort to put "history" on tape had been in operation in 1909 (or at any time in the next thirty years) would Sir Archibald have been one of those its interviewers would have sought out? If they had interviewed him then, would they have asked the right questions?

Perhaps the networks of citations will tell us more than we now know about how science operates. How it reached its present eminence, which only our cold and lukewarm history can reveal, is also a part of the study of what it is. It has even been suggested by Dr. Price that "Babylonian and Egyptian mathematics, medieval astronomy, studies of Galileo and Newton and similar things that are no longer very relevant to the science learnt in primary school are much more apposite to the analysis of why science works the way it does than similar studies of Rutherford, Planck, and Einstein."

It is anyhow clear that there are better ways of studying the construction of a motor than to observe it in action when its shafts are already going round at several hundred r.p.m. It is also more than possible that the Baconian millenium has not yet arrived, that no such things as the scientific method exists, and that the internal, developmental history of a science may become, if properly elucidated, a matter of great interest, perhaps even of some use, to its practitioners.

We are accustomed to the thought that the study of primitive societies may show us something about the fundamental elements of more complex organizations. Anthropology has the added virtue of displacing us from our familiar patterns of thought and belief. If we are careful to avoid the fallacy of the Enlightenment, that human nature is always and everywhere the same and that human minds can be assumed to have worked in the same way at all periods, history can serve this purpose even more effectively. I think it more rewarding for the reason that it forces us to struggle with strange configurations of thought which at the same time have an undoubted genetic connection with our own thought processes. To comprehend the mind of man is the purpose of some of the sciences and all of the humanities.

In the meantime it is well that materials should be gathered - by tape, by card, by interviews and reminiscences, as well as by the conventional methods of the preservation of documents - for the eventual writing of history. Neither is it always necessary that many years should go by before "perspective" can be achieved and hot hisotry written. I rejoice that one of the great projects of this kind - a history of the part played by the United States government and its agencies in relation to the life sciences in the first two generations of the twentieth century - should have fallen to the lot of a practised historian, Professor George Rosen, who has had extensive experience with cold history too. A juster temperature may be expected in the work which will result.

There is room for both kinds of history, hot and cold. If, however, historians are subjected to increasing pressures and persuasions to make themselves "useful," if realization of the great scope and achievement of the contemporary revolution in science leads to neglect of conventional historical activities, if the "science of science" claims all hands, then the prospect will indeed be chilling in the end, hot though it may be to begin.

If studied with intelligence and imagination, history may now and again prove to have a certain limited utility. If useful lessons are required of it, however, the time will come (it has often come before now) when the lessons will be fed into it ab initio. If pursued in a sufficiently utilitarian spirit, history may in the end turn into something else, perhaps into propaganda. Our convictions about science and medicine and the distribution of medical services may be forced upon it. Clio, like Daphne, may then truly transform herself because too closely and urgently pursued. Is it not, perhaps, an occupational hazard of the hot historian to find himself, panting and frustrated, up a tree?

Correspondence

Conization of the Cervix

The Editor

Nova Scotia Medical Bulletin

Dear Sir:

Several colleagues have pointed out that our advice re curetting the upper canal and endometrium before coning the cervix can lead to loss of a minute area of in situ carcinoma in the cervical canal (Conization of the Cervix, N. S. Medical Bulletin, XLIV:221, 1965.) This is certainly true, and many gynecologists will wish to cut out the cone before introducing even a sound into the canal. We believe our method to be technically simpler and will yield generally better cones, but agree that the alternative is more logical and slightly more accurate. The operator will have his choice.

Yours sincerely,

S. C. ROBINSON, M.D.,

Assistant Professor.



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Bacterial Pneumonias

(continued from page 242)

bronchitis. The relative rarity of acute *H. influenza* respiratory infections in adults does not warrant disregarding this organism as a pathogen, particularly in patients who develop acute infections against a background of chronic bronchitis, pulmonary emphysema, and bronchiectasis. Infections due to *H. influenza* call for treatment with tetracycline.

Friedlander's pneumonia occurs most commonly in alcoholics, diabetics, and patients with other debilitating disease. Early recognition is

essential if therapy is to be effective.

In alcoholic patients, there are similarities between Friedlander's pneumonia and pneumococcal pneumonia. Cavitary disease has been probably more common in pneumococcal infection than has been supposed. Alcoholic patients with pneumococcal pneumonia and cavitary disease also often have bacteremia, shock, and leukopenia, and their prognosis is poor. Early recognition followed by prompt therapy is essential.

Sterile pleural effusions are a more frequent complication of pneumococcal pneumonia than true empyema. They may be associated with fever that is not affected by further antimicrobial therapy, suggesting that inflammation rather than the presence of bacteria is the most important determinant in the genesis of fever. Sterile effusions usually resolve without therapy. Drainage through a large lumen catheter may be indicated.

Some metastatic manifestations of pneumococcal pneumonia may be life-threatening despite very minimal pulmonary infection. There is the classical triad of pneumococcal meningitis, endocarditis, and pneumonia. Despite adequate antimicrobial therapy, the patient may be left a "cardiac cripple."

Complicating Conditions

In some patients with slow resolution of bacterial pneumonia the infection fails to clear within four weeks. When patients over 40 have slowly resolving lobar consolidation and indolent rather than acute symptoms, surgical intervention should be considered.

Occasionally, but rarely, patients with acute respiratory disease have carcinoma and sometimes patients with low-grade pulmonary symptoms suspected of having tumors may have only pneumonia, which responds readily to antimicrobials.

A variety of other local and systemic conditions predispose to bacterial infection in the lung. Among the local factors are trauma, bronchostenosis, foreign body, aspiration, bronchiectasis, and cystic disease of the lung. Systemic diseases complicated by recurrent pulmonary infections include multiple myeloma, chronic lymphatic leukemia, agammaglobulinemia and hypogammaglobulinemia, the nephrotic syndrome, collagen vascular disease, splenectomy in children, and perhaps such a generalized disease as alcoholism.

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- (2) Full-time positions for Board Eligible and Certified Psychiatrists are available in the Provincial Hospital in St. John's. Salary range \$11,500 - \$14,000.
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Genetics and the Physician

P. L. Delva, M.D. Kingston, Ontario

PART III

In this issue, I will discuss briefly cell anatomy, cell function, and protein synthesis. This will enable us to understand more clearly the exact nature of some diseases associated with an enzyme defect such as phenylketonuria and galactosemia; we will discuss them in our next instalment.

CELL ANATOMY AND CELL FUNCTION

In Figure I there is a drawing of a "typical" cell. The cell membrane is 75A thick and consists really of 3 separate layers. It is very loose, folding outwards to form villi, or inwards to form invaginations, vesicles, and vacuoles. Some invaginations are continuous with the outer of the two membranes wrapped around the nucleus: a network of channels is thus formed, called the endoplasmic reticulum. This reticulum can be smooth or rough, depending on the absence or on the presence of ribosomes attached to the outer wall of the channels. These ribosomes are granules 150-200A in diameter. They consist of protein and ribonucleic acid (RNA). Their function will be discussed in the next section. The endoplasmic reticulum, in addition to allowing communication between the layers of the membrane surrounding the nucleus and the outside of the cell, also communicates with the Golgi apparatus. The function of this Golgi apparatus remains a mystery; it may be concerned with the manufacture of giant molecules.

All these membranous structures enclose the ground substance. This ground substance is a colloidal material consisting of macromolecules, smaller organic compounds, and ions; it contains a pair of centrioles, mitochondria, a nucleus, and other bodies such as lysozomes, chloroplasts, etc., which are not so important from our point of view. Each of the pair of centrioles is at a right angle to the other; they have a definite structure, similar to that of a cilium, and are concerned with the formation of the spindle in mitosis and meiosis. The mitochondrion is a double-membraned structure, the inner membrane of which is much folded; here, oxidative processes occur, the energy re-

leased converting adenosine diphosphate to adenosine triphosphate. The number of mitochondria in a given cell is directly related to the degree of activity of the cell.

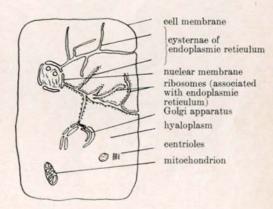


Fig. I — Typical Cell

PROTEIN SYNTHESIS

Figure II shows a strand of DNA acting as a template for the manufacture of "messenger" RNA. This messenger RNA then moves out of the nucleus to become somehow incorporated with or attached to a ribosome. RNA is identical chemically to DNA except that the thymine in DNA is replaced by uracil in RNA, and that the deoxyribose in DNA is replaced by ribose in RNA. So that quanine acts as a template for cytosine and vice versa. Adenine, however, acts as a template for the formation of thymine in DNA, and of uracil in RNA. In our figure II, part of the messenger RNA reads UUU: this is the threeletter code for the amino-acid phenylalanine. The "transfer" RNA for phenylalanine has a complementary AAA region, which becomes aligned over

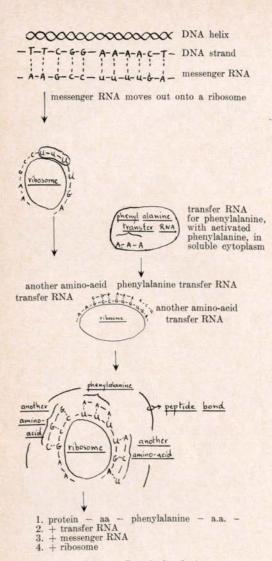


Fig. II - Protein Synthesis

the UUU regions of the messenger RNA. All essential amino-acids are similarly coded by a specific three-letter sequence. Peptide bond forming enzymes then hook all these amino-acids up to form a specific protein which then detaches itself somehow from the transfer and messenger RNA.

This simplified sequence of events is illustrated in Figure II. Some of the steps described are still somewhat hypothetical. Their elucidation, however, forms part of the fantastic advances in cellular biology, resulting mostly from the application of electron microscopy and of biochemical and other micromethods.

BOOK REVIEW

Clinical Examination. A Textbook for Students and Doctors by Teachers of the Edinburgh Medical School; Editor John Macleod. Published by E. & S. Livingstone Ltd., Edinburgh and London 1964. Price \$6.25.

This most recent of the Textbooks on Clinical Examination is a team effort of a group of eight prominent teachers of the Edinburgh Medical School. The book follows the tradition of other publications originating in Great Britain by maintaining a high standard of clear and concise language.

In a simple and relaxing manner the reader is introduced to the history taking and the principles governing the physical examination. The functional inquiry as it is known on this side of the Atlantic is not mentioned.

Analysis of symptoms and signs, as discussed in the second chapter, will appear somewhat scanty to a reader accustomed to a more detailed approach such as one finds for example in Harrison's Textbook. The cross-reference system that starts in this chapter is slightly irritating, as it refers the reader too frequently to other sections of the book.

In the chapters that follow there is a wealth of up to date information. One would, however, like to be given more often a description of mechanisms underlying various clinical manifestations.

A welcome feature in a book of this type is the chapter on psychiatric examination and the chapter dealing with examination of infant and child

Illustrations are simple and clear, the text easy to read, the format pleasing and practical. This is an up to date book and makes useful reading both for students and doctors.

J.J.S.

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Hemolytic Disease of the Newborn Management in Pregnancy

Bruce S. Morton, B.sc., M.D.C.M.1

Halifax, N. S.

The outlook for hemolytic disease of the newborn in Nova Scotia has improved greatly in recent years. More, however, waits to be done. Properly timed exchange transfusions have made Kernicterus a preventable disease, while new methods of prenatal management such as examination of amniotic fluid and intrauterine fetal transfusion have combined to bring the loss rate from this condition below 15 percent in some Canadian centres as compared with 30 percent in this Province.

The Neonatal Jaundice Committee was formed in January of 1964 under the auspices of the Nova Scotia Medical Society through the Standing Committee of Child Health. Supported by a Federal-Provincial grant, the aim of this project was to study the latest methods of management of the condition and to make the information available to physicians in Nova Scotia in an attempt to achieve higher survival rates. Members of the committee travelled throughout the Province in teams of a paediatrician, and an obstetrician, discussing the problem of neonatal jaundice with Branch Medical Societies. As a result of these discussions it became apparent that the problem can be complex with varied opinions regarding management. It was therefore decided to inaugurate an Rh Committee. A committee called the "Committee on Fetal-Maternal Incompatibility" was therefore formed to consider problems in this field and had its first meeting in January of 1965. This committee of obstetricians and paediatricians meets weekly to discuss fully investigated cases, following which a considered opinion is available to the referring physician to aid in the management of his patient. We believe that this team approach is necessary if we are going to achieve lower mortality rates in this condition.

The following case summary is an example of management in a representative problem case:

This was Mrs. C's fifth pregnancy. Her first two pregnancies were full term and unaffected. Evidence of incompatibility was first suspected following the delivery of her third infant at term. This baby had become jaundiced during the first day of life. Investigation showed the mother's blood group to be A Rh negative with a genotype of ede /ede. Her husband's blood group was A Rh positive CDe/CDe. The mother's blood revealed an incomplete anti D titre of 1:8. Hemolytic disease of the infant was confirmed by a positive direct coombs test in the baby's blood. The baby became jaundiced and an exchange transfusion was done to prevent brain damage (Kernicterus).

In her fourth pregnancy the mother was followed very carefully during her prenatal period with frequent antibody titre determinations. The incomplete anti D titre remained

at 1:8 throughout. She was allowed to go to term. At delivery the direct coombs test was positive. There was no anemia but because of increasing jaundice an exchange transfusion was required. As the jaundice was more severe than with the previous baby, a second exchange transfusion became necessary. Thus, the history showed four previous pregnancies all delivered at term. The first two were unaffected, but the infants of the second two pregnancies required exchange transfusions for Rh Hemo-

lytic Disease.

With her present (fifth) pregnancy the mother first went to her physician at 23 weeks gestation. The incomplete anti D titre was 1:4. Two weeks later, the titre was 1:8 and remained at this level on subsequent examinations. At 32 weeks gestation an amniotic tap was done and an estimation of the bilirubin content in the amniotic fluid showed the baby to be affected to a moderate degree. In view of all the above, and although the blood antibody titres were not rising it was decided to induce labour at 36 weeks. Using the Syntocinon Drip method an induction was carried out successfully and the infant was born weighing 5 lbs., with a hemoglobin (Hb.) of 13 g.% and a cord bilirubin of 5.9 mg. % total and 5.2 mg.% indirect. The direct coombs test was positive.

Attending Pediatrician, Halifax Children's Hospital and Grace Maternity Hospital.

¹Assistant Professor of Pediatrics, Dalhousie University

Department of Maternal and Child Health, Project No. 602-13-20. Consultative Service for Hemolytic Disease of the Newborn.

Now that Kernicterus can be prevented, neonatal mortality in this disease is primarily related to anemia. The more anemic a baby is the more hydropic he becomes. These babies usually die from heart failure. The aim of premature induction is to deliver an infant whose Hb. is above 10 g.%. This was achieved in this case. Even so, the hemolytic process was sufficiently severe to require four exchange transfusions. The baby was discharged well.

Management

The most common cause of hemolytic disease is the D antigen where the mother is Rh negative. Other blood group antigens (C, E, Kell, Duffy etc.) may be the cause, and in these cases the mother may be Rh positive. All of these antigens must be considered in any problem designed to save babies from fetal-maternal incompatibility.

- (1) Five ml. of clotted blood is withdrawn from all prenatal patients irrespective of parity and Rh type at the first visit, preferably between the 16th and 20th week. This specimen is then sent to the laboratory in the tube provided by the Red Cross for Rh testing. This testing includes Rh and major blood group assessment and the detection of any antibodies, thus determining whether or not the patient is sensitized. All multiparous patients should again be tested at 28 - 30 and at 36 weeks even if no antibodies are found at the time of the first testing, as sensitization may occur at any time during a pregnancy even though there were no antibodies present at the onset. In some cases, significant disease can occur in the unborn baby and premature induction may be necessary even though it is the first sensitized pregnancy.
- (2) If antibodies are found, a specimen from the husband should also be sent to the Red Cross and specimens from the mother should be submitted monthly until the 7th month; every two weeks until the 8th month, and then weekly until delivery.

(3) In most cases an amniotic tap is recommended when antibodies are found. This is usually done between the 30th and 33rd week of gestation. When there is a history of a stillbirth or a hydropic neonatal death the examination should be performed earlier. The degree of pigmentation of the amniotic fluid, i.e. the bilirubin content, gives valuable additional information as to if and when premature induction of labour should take place,

The decision to induce labour is not made until the result of the antibody titres, the history of all previous pregnancies and the amniocentesis results are available. Successful management will prevent delay in the delivery of a severely affected infant but will permit the pregnancy to go to term when the baby is affected mildly or not at all.

Summary of Recommended Management

- Blood should be submitted to the Red Cross for testing in all pregnancies irrespective of parity and Rh status.
- (2) If antibodies are found, specimens should be submitted from the husband, and specimens from the mother should be resubmitted monthly until the 7th month, every 2 weeks until the 8th month and then weekly until delivery.
- (3) Most cases showing antibodies should have an amniocentesis performed between the 30th and 33rd week.

The Committee is anxious to help in any case of suspected incompatibility. Their address is: The Committee on Fetal-Maternal Incompatibility, 5821 University Avenue, Halifax, N. S., or a phone call to Halifax 422-6501 asking for the Obstetrical Resident on duty will put the referring doctor in contact with this committee.

F. GORDON ROBERTSON, C.L.U.

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"Rheumatoid" Heart Disease

N. OMABOE, B.Sc., CERT.FIN.MED., M.D., D.T.M. & H: L.M.C.C.1

and

S. K. MITRA, B.Sc., M.B., B.S., M.R.C.P.E.2

The concept of "Rheumatoid" heart disease is well recognized in the medical literature (Sinclair, R. J. G., et al, 1956; Bevans, M., et al, 1954; Ogryzlo, M.A., 1953). Rheumatoid arthritis is not a disease confined to the joints only but may affect other systems of the body as well. (Cruickshank, B., 1958; Sokoloff, L., 1953). The main pathological lesions in the heart are: 1. rheumatoid granuloma, and 2. non-specific inflammatory lesions (Lebowitz, W. B., 1963). Rheumatoid actiology of granulomata has been well established from the type of the specific pathological lesion, e.g., granulomata rich in plasma cells, lymphocytes, histiocytes and monocytes. The incidence of eardiac lesions in rheumatoid patients, is increasingly being recognized mostly in necropsy studies (Fingerman & Andrus, 1943; Lebowitz, W. B., 1963). Rheumatoid granulomata have been found in the pericardium, myocardium, valve cusps, and aorta. The incidence of such lesions is 1-3% of all cases. (Sokoloff, L., 1953). Lebowitz, W. B. (1963) found the incidence of these pathological lesions in the heart, as seen in necropsy studies to be as high as 82%, while clinical cardiac lesions were as low as 27%. The present article illustrates a combination of peripheral rheumatoid disease with a significant cardiac lesion.

CASE REPORT

J. H. F., a man, aged 36 years, was admitted to hospital on February 15, 1963, with a history of painful swellings of the joints of all the extremities and inability to move them, of four years' duration. His history however dates back to August, 1949, when he suffered from dysuria and a whitish urethral discharge. He was treated in a hospital with arsenic and sulphonamide therapy with apparent swelling of the right knee joint and afterwards of the right elbow joint. He had treatment in hospital for four months without improvement. Since then, he had been having pains in the joints on and off, especially during the rainy season.

In 1959, he was involved in an automobile

accident and as a result his right knee joint was operated upon and subsequently, in 1962, arthrodesis of the same joint was performed.

In November, 1962, he was treated with the drug "Butazolidine" for his joint pains. A few days after the start of this therapy, he noticed swellings of both elbows, wrists and ankle joints as well as the metacarpal, metatarsal and interphalangeal joints of the extremities. In that present condition, he was referred to the medical unit of Korle Bu Hospital in Accra. Ghana.

Clinical examination:

General: Young man of average build. He was moderately anaemic, there was no jaundice.

Locomotor system: The right knee joint was swollen and fixed in extension. The right ankle joint was swollen and painful. The left knee and ankle joints were also swollen, but painful movement was still possible.

Both wrists and elbow joints were swollen and painful. The right elbow was partly flexed and fixed. Mobility was restricted in all the joints. Ulnar deviation was present in both wrists and there were spindle shaped deformity of the fingers of both hands, especially of the third and fifth fingers at the middle phalangeal joints (Fig. 1). Both shoulder joints and the spine were freely mobile. Voluntary muscles of the arms, fore-arms and also of the legs were atrophied due to disuse.

Cardio-vascular system: There were visible carotid pulsations in the neck. The apex beat, left ventricular in type, was palpated in the sixth left inter-costal space an inch outside the mid-clavicular line. There was a systolic flow murmur and a significant early diastolic murmur at the base of the heart. The brachial and femoral pulses were collapsing in character. The blood pressure was 180/50 mmHg.

No other abnormality was detected during the examination of the other systems of the body.

¹Resident, Victoria General Hospital, Halifax.

²From the Medical Unit, Korle-Bu Hospital, ACCRA, Ghana.

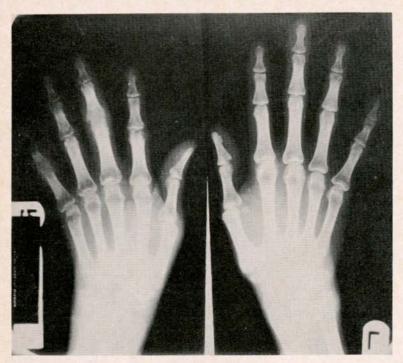


Figure 1. The photograph of both hands showing ulnar deviation and spindleshaped deformity of the fingers.

Figure 2. X-ray picture of both hands showing deformed carpal and metacarpal joints with subarticular erosion of the first carpometacarpal joints and loss of joints spaces,

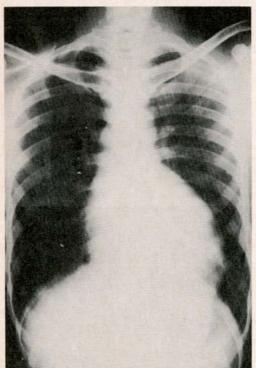


Figure 3. X-ray picture of the chest showing enlarged cardiac silhouette with prominent aorta.

Laboratory findings;

Blood:

Hb. : 64% (9.3 gm %)

WBC: 5,200. emm

Sedimentation rate: 70 mm in 1st hour (Westergren method)

Uric acid: 3 mg %

No Lupus Erythematosus cells were found in

the peripheral blood.

Radiological examination: X-ray of both hands showed decalcification of small bones with loss of joint spaces. Left wrist showed subarticular erosion of the first carpo-metacarpal joint. The right wrist showed erosion of the lower articular surfaces of radius and ulnar styloids (Fig. 2).

X-ray of chest showed an enlarged cardiac silhouette with prominent aorta (Fig. 3).

Electro-cardiographic examination: Showed left axis shift, left ventricular hypertrophy and ischaemic changes.

Treatment: He was treated with heavy doses of Prednisolone (30 mg a day) and also Acetyl salicylic acid (40 grs) daily. He was also treated with heat and exercises of the involved joints.

He felt symptomatically much improved and the dosage of Prednisolone was reduced gradually. He was discharged from the hospital on March 28, 1963, to continue on Prednisolone 10 mg a day and Acetyl salicylic acid 15 grs daily and to be followed up in the medical clinic. No treatment was necessary for the cardiac condition, as it was clinically quiescent.

DISCUSSION

Rheumatoid arthritis does not appear to be as common a disease in Ghana and West Africa as it is in Western Europe or America. Acute rheumatic fever is also an uncommon condition in this part of the world. Rheumatic heart disease, however, is not rare. That a case of rheumatoid arthritis presents with cardiac involvement must be very uncommon here. To the knowledge of the writers this has not been described from Ghana.

In the present case, the diagnosis was reached elinically from the cardio-vascular findings of aortic incompetence associated with peripheral signs of rheumatoid arthritis. Laboratory finding of a negative Kahn excluded syphilitic disease as a cause of the aortic incompetence. Systemic lupus erythematosus was also excluded by the negative laboratory findings. It is also important to exclude the possibility of rheumatic infection in these groups of cases, as it is difficult to differentiate between a case of rheumatic fever and the early stage of rheumatoid arthritis, unless one finds high anti-streptolysin "O" titres in the serum of the patient with rheumatic fever. It is known that rheumatic heart disease may co-exist with rheumatoid arthritis though not commonly (8%) - Lebowitz (1963).

In this case, one may not be sure of the possibility of co-existing rheumatic infection, especially in view of the non-availability of the laboratory facilities in this situation to estimate the antistreptolysin "O" titres. The pureness of the peripheral signs of arthritis as seen in this case incline the writers to the diagnosis of rheumatoid rather than a rheumatic condition. Moreover, Wood (1956) believed that in cases of rheumatic aortic incompetence, some degree of aortic stenosis was usual, whereas in this case the valvular lesion was of aortic incompetence only. The possibility of gout was excluded by the normal blood uric acid level.

Rheumatoid aortitis with aortic valve incompetence is more commonly seen with ankylosing spondylitis. Clark et al (1957) described two cases of aortic incompetence and a similar

case was described by Hope-Ross, et al (1960) in association with rheumatoid arthritis only.

In an extensive clinical and pathological study of 62 cases of rheumatoid arthritis, Lebowitz, (1963) found that the frequency of cardiac disease in rheumatoid patients was higher than in the control group, the incidence of hypertension and hypertensive heart disease was lower and coronary atherosclerosis and myocardial infarction were encountered with similar frequency in rheumatoid and control patients.

Rheumatoid pericarditis (Litchfield, 1963; Wilkinson, 1962; Glyn and Pratt-Johnson, 1963) and constrictive pericarditis (Gimlette, 1959) in rheumatoid patients have also been described. Both trauma and infection have been considered precipitating factors by Cecil & Loeb (1959).

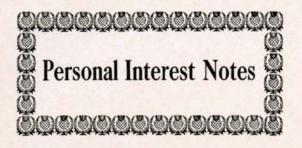
The history of gonococcal infection of the urethra and of the joints and the history of trauma in this case are worthy of note, as they either singly or jointly might have precipitated the onset of rheumatoid arthritis.

Thus the available clinical evidences and the findings of the laboratory and other special investigations in this case favour the diagnosis of "Rheumatoid" heart disease.

Our grateful thanks are due to Dr. S. R. A. Dodu, Physician Specialist in charge of the Medical Unit, under whose care the patient was admitted, for his permission in publishing this case.

References

- Bevans, M., Nadell, J., Demartini, F., Regan, C. (1954). Amer. J. Med., 16, 197.
- Cecil, L. R., and Loeb, F. R. (1959). A textbook of Medicine. W. B. Saunders Co., pp. 1368.
- Cruiekshank, B. (1958). J. Path. Baet., 76, 223.
- Fingerman, D. L., and Andrus, F. C. (1943). Ann. Rheum. Dis., 3, 168.
- Gimlette, T. M. D (1959). Brit. Heart J., 21, 9.
 Glyn, J. H., and Pratt-Johnson, J. H. (1963).
- Glyn, J. H., and Pratt-Johnson, J. H. (1963) Brit. Med. J., 1, 262.
- Hope-Ross, P., Bian, E. J., Palladine, V. S., Graham, G. (1960). Ann. Int. Med., 52, 682.
- Lebowitz, W. B. (1963). Ann. Int. Med., 58, 102.
 Litchfield, J. W. (1963). Brit. Med. J., 1, 682.
- 10. Ogryzlo, M. A. (1953). Ann. Rheum. Dis., 13,
- 323.
 Sinelair, R. J. G., and Cruickshank, B. (1956).
- Quart. J. Med. (New series), 25, 313.
- Sokoloff, L. (1953). Amer. Heart J., 45, 635.
 Wilkinson, M. (1962). Brit. Med. J., 2, 1723.
- Wood, P. (1956). Diseases of the heart and circulation. Erye & Spottiswoode, pp. 562.



OPERATION HEAVENLY. AHHH-MEN: Poole, England. (AP)

"It was God who took out my tonsils", the little boy told his mother after his operation at the Poole General Hospital.

"When I was taken into the big white room, there were two lady angels dressed in white. Then two men angels came in. Then God came in."

"How did you know it was God"?, asked the mother.

"Well one of the men angels looked down my throat and said -'God, look at that child's tonsils.'

"Then God took a look and said, 'I'll take them out at once'." (The conversation was reported by the hospital's staff newsletter.)

> Antigonish-Guysborough Society

Dr. Kenneth Mackinnon of Montreal, visited his mother, Mrs. W. F. MacKinnon during the summer. Dr. MacKinnon was guest speaker at the annual meeting of the Prince Edward Island Medical Society.

Dr. Cecil MacLean, has returned home after a trip to London and Paris.

CAPE BRETON MEDICAL SOCIETY

During the latter part of August a meeting was held in Glace Bay between representatives of the Glace Bay Medical Association and representatives of the United Mine Workers of America, District 26. The Medical Association was represented by Dr. J. A. McDonald, Dr. J. O. MacNeil, Dr. William Nicholson, Dr. A. Green, and Dr. J. B. Tompkins.

A complete discussion was held on the new miners' medical plan which will go into effect on November 1st, 1965. Both parties indicated a deep concern for the pensioners, not only in the Glace Bay area but all over District 26, who have difficulty getting medical coverage. It was felt that the discussion had proved of mutual benefit to both parties. meetings are planned for other areas ending with a general meeting to include representatives of the doctors from all areas, the company and the union.

Dr. A. G. MacLellan, chairman of the Gaelic College Board of Governors, officiated at the turning of the first sod at the site of the Giant MacAskill Memorial Museum which is to be built on the college grounds of St. Ann's. Construction of the new building has been approved as Victoria County's centennial project.

Dr. Raymond Kennedy, a veteran of Cape Breton sailing, skippered his "Lady Anne" to victory in the annual Ingonish race and back on August 1 and was presented with the Harold Schwartz trophy.

HALIFAX MEDICAL SOCIETY

Dr. W. C. MacKenzie, president of the Royal College of Physicians and Surgeons of Canada, a graduate of Dalhousie, has been awarded an honorary fellowship by the Royal College of Surgeons, Edinburgh.

Dr. Robert O. Jones, this year's national president of the Canadian Medical Association stressed to the New Brunswick Association at their annual meeting recently, that, "We are determined to protect the freedom of the doctor to give high quality medical service to his patient". The concern of doctors was not "financial greed" but the "preservation and improvement of the quality of services".

Former friends in Halifax were glad to see Mrs. Willis McLeese, the former Dr. Adelaide Fleming on her recent short visit to the city where she visited Dr. and Mrs. Clarence Gosse.

Other summer visitors were Dr. and Mrs. Scott Leslie and their five children. Dr. Leslie is presently with the Canadian Overseas Medical Service in Leeds, England. This is his first visit to Halifax in nine years.

Dr. J. E. Harris Miller was recently re-elected president of the Maritime Trap and Skeet Club Association at its annual meeting at Fredericton, New Brunswick. Dr. Miller tied for second place in the trap double, 20 guage skeet, trap singles, and 12-guage skeet. His young son, Robert won the junior all-guage skeet title.

Dr. J. J. Stanton was elected Grand Knight of the West Knights of Columbus Council 5017 at Spryfield.

Dr. G. Ross Langley has been awarded a \$15,400 research grant from the Life Insurance Medical research Fund to do research on antibodies and cell metabolism. This Fund is provided by 141 life insurance companies throughout the United States and Canada. Awards are made to workers in the fields that can contribute to knowledge of basic disease mechanisms.

Dr. Alec Sehon, of Dalhousie University has been awarded a similar amount for research by the same donor.

Dr. H. B. Colford was commended in a recent Chronicle-Herald editorial because of the recent releases by Dr. Colford urging parents to make certain their school-aged children were immunized before starting the school term. Dr. J. M. Tainsh, who has been on the staff of the Halifax Convalescent Hospital was presented with a gift from his colleagues as he left to become Administrator of the Halifax Mental Hospital.

Dr. and Mrs. Peter C. Gordon and family have returned to Halifax from Baltimore where Dr. Gordon had been doing postgraduate work at Johns Hopkins Hospital.

Dr. Frank A. Dunsworth, chief of staff, psychiatry department at the Halifax Infirmary addressed those who took part recently in a two day session on psychiatry as part of a community health program for the Sisters of Charity sponsored by the psychiatric unit of the Infirmary.

LUNENBURG-QUEENS MEDICAL SOCIETY

Dr. and Mrs. Bruce Crowe, New Germany recently returned from a trip to Europe. Dr. Crowe attended the British Congress of Gynaecology and Obstetrics held at Glasgow University.

Dr. Kenneth R. MacIntyre has commenced practice in the Town of Lunenburg. He is associated with Dr. D. C. Cante-

lope.

A Memorial Fund to honor the memory of Dr. C. B. Cameron of Petite Riviere, who died last November has been set up, so that mothers who had been attended by Dr. Cameron may contribute toward the purchase for equipment for the nursery or case room in the new Dawson Memorial Hospital. Dr. Cameron served the area from East Port Medway to West La Have. and from Middlewood to the LaHave Islands from 1919 - 1964. WESTERN NOVA SCOTIA MEDICAL SOCIETY

Dr. Donald Nickerson of Illinois was a recent guest at the home of his parents in Yarmouth.

Dr. Michael J. Cassels, pathologist of the Yarmouth Regional Hospital spent his vacation in Prince Edward Island. Dr. Colin Wood replaced him at the

Laboratory Dr. Wood is Associate Professor of Pathology at the University of Maryland, Baltimore, Md., U.S.A.

UNIVERSITY

The Dalhousie Institute of Public Affairs in conjunction with the University's Faculty of Medicine will conduct a week-long course for public health inspectors in the Atlantic provinces, starting September 13th in Halifax. The course is being offered under the auspices of the health departments of the four Atlantic provinces. Fifty instructors will be drawn from the university, health departments and other agencies.

An innovation by the Dalhousie postgraduate division is believed to be unique. It is the provision of lectures and meetings for doctors in northern New Brunswick through a cooperative arrangement with the Faculty of Medicine of Laval University in Three English Quebec City. speaking teachers from Dalhousie alternate with three French speaking teachers from Laval to present the Edmunston regional course at Hotel Dieu de Saint Joseph each vear.

CONGRATULATIONS

A testimonial dinner was tendered during September to Dr.
L. R. Meech at St. Elizabeth's
Hospital, North Sydney to commemorate his golden anniversary
in the medical profession.

Sister Rita Clare has been appointed Administrator of the Halifax Infirmary, succeeding Sister Catherine Gerard who is now Hospital Consultant for the Sisters of Charity.

BIRTHS

To Dr. and Mrs. Alan R. Hebb, a son on September 5, 1965, at the Toronto General Hospital.

To Dr. and Mrs. Clary Townsend, (née Judith Gruchy), on July 21, 1965, a daughter, Judith Lynn, at the Prince Edward Island Hospital, Charlottetown, P.E.I.

OBITUARIES

Dr. Lewis M. Sproull of New Glasgow died on July 27, 1965, in hospital in Halifax after having been ill for some time. Born at Pictou Landing, he graduated from Pictou Academy, and Dalhousie University in Medicine and practised in New Glasgow for over 20 years. He was a past president of the Pictou County Medical Society and first president of the Pictou County Historical Museum. He is survived by his wife and four children to whom we extend sympathy.

HALLOWE'EN - OCTOBER 31

Hallowe'en is far better known to the small fry for its trick-ortreat connotations than for its saintliness. Dressing up, letting off fireworks, collecting largesse—they're all part of Hallowe'en. But there can be a less than happy result of the fun.

When the children start out in all their finery, there is usually a mask to complete the disguise. A mask can slip over the child's face when he is running out in the road and it can cover his eyes. It is much safer and just as concealing if the young face is well smeared with some black or other coloured goo like lipstick and eyebrow pencils. You can mix burnt cork with cold cream, or you can buy harmless stage make-up or false whiskers at some stores.

Fireworks usually come into the picture, no matter what the celebration. Young children have been blinded or otherwise injured when they have been allowed to operate these explosives without adult supervision.

Don't allow the youngsters out alone at night unless you have inspected their costumes for safety. Don't let them wear any garment over which they could trip; or any headgear that could interfere with their vision where there is traffic.

MEDICAL-DENTAL LIBRARY

DALHOUSIE UNIVERSITY

- I. New Address: 5963 College St., Halifax, N. S.
- II. Librarian: Miss M. D. E. Fraser, B.A. (Alta.), B.L.S. (Tor.)
- III. Telephone: Library 429-1420 Local 342 Emergencies: 429-4943
- IV. Service Hours: Fall, Winter, Spring terms
- A. Circulation Desk (Local 300)
 8:45 A.M. 9:00 P.M.
 Mon. Fri.
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 Closed Sundays and Statutory Holidays.
 Reduced service Christmas New Year's, other holidays.
 - A Librarian is on duty -Tuesday and Wednesday evenings and all day Saturday.
 - Requests for material by telephone are limited to three.
 - Material set aside for pickup will be held 48 hours.
 - Periods of Loan: Books -2 weeks, journals - one week. Ask at Desk for further details.

B. Xerox Service (Local 300) Campus and regional rate - .10c an exposure.

Off-campus and commercial rate - .15c an exposure Hours: 1:00 P.M. - 5:00 P.M. Monday - Friday.

- Requests by telephone emergencies only.
- Payment: cash, coupons (\$2.00, \$5.00, \$25.00 values), cheque (plus Exchange), Money order.
- Service will be extended as need develops.

C. Information Service (Local 342)

- Telephone service quick factual queries - e.g. directory information. The checking of references is limited to three.
- Bibliographic searches are limited. These will be done when essential or in emergency.
- Guidance will be given in use of indexes, abstracts and other reference materials
- 4. Information service will be extended as soon as possible

V. Regional Service

- Mail service is provided to physicians in the Atlantic Provinces for specific requests submitted. The library reserves the right to Xerox material @ .10c an exposure for current and heavily used journals when no duplicates are available.
- Current bibliographic searches are made but it is necessary that requests be mailed well in advance of need. It is not always possible to process these within 24-36 hours. When material must be borrowed from elsewhere in Canada, 7-10 days must be added.
- References not available in Nova Scotia will be sent to patrons in New Brunswick and P.E.I. with location indicated. The nearest library should be asked to borrow material on I.L.L. Citations for Newfoundland will be sent to the St. John's General Hospital which processes - Interlibrary loan requests for that area.

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