THE NOVA SCOTIA MEDICAL JOURNAL

DECEMBER 1991 VOLUME 70 NUMBER 6

CONTENTS

Editorial – The Doctor Patient Relationship – Understanding the Change – J.F. O'C 162

Dr. Rob Stokes – President 1991-1992 164

Consent to Treatment: Common Misconceptions – S. Cameron, MD, Halifax, N.S. 166

Patients' Attitudes and Expectations on Entering The Nova Scotia Hospital – L. N. P. Voruganti, MD and B. S. Clark, PhD, Halifax, N.S. 169

Epstein-Barr Virus Infection and Infectious Mononucleosis – J.C. LeBlanc, MD, D. Leddin, MD, S. H. S. Lee, PhD, W. L. Greer, PhD and G. R. Langley, MD, Halifax, N.S. 175

Estrogen and Progesterone Receptor Determination in Breast Cancer – P. G. Lopez, MD, M. Givne, MD and C. McKenzie, BSc, Halifax, N.S. 178

Problems with Central Venous Access Devices – B. Colwell, MD, R. MacCormick, MD, D. Campbell, MD and G. Hirsch, RN, Halifax, N.S. 180

Current Topics in Community Health – D. R. MacLean, MD Halifax, N.S. 183

An Appreciation – Dr. Neil Kenneth MacLennan 184

Dr. William Grigor – First President of The Medical Society of Nova Scotia – A. E. Marble, PhD, Halifax, N.S. 185

Personal Interest Notes 187

Obituaries 188

Proceedings of the 27th Meeting of Council and the 138th Annual Meeting of The Medical Society of Nova Scotia I

Presidential Valedictory Address – 1991 – Dr. William Canham XXI

Pictorial Highlights XXIII

Page of Officers XIV

Second Class Mail Registration No. 5363
Halifax, N.S.

THE NOVA SCOTIA MEDICAL JOURNAL

EDITORIAL BOARD

Editor-in-Chief
Dr. J.F. O'Connor

Associate Editor
Dr. A.C. Irwin

Dr. A.J. Buhr
Dr. J.P. Welch
Dr. R.W. Putnam
Dr. T.J. Murray

Managing Editor
Mr. R.J. Dyke

Editorial Assistant
Mrs. T. Clahane

The Doctor Patient Relationship – Understanding the Change

It is obvious to most that the doctor patient relationship in our health system has changed. Understanding and absorbing this change, however, deserves some attention. Certainly the Canadian Medical Association recognized this when it centered its attention on "Physician Autonomy" at the last CMA Leadership Conference. Autonomy after all is merely a word describing our place in the doctor patient or the doctor community contract.

This contract, thought by physician to be based on trust and mutual respect, often had an underlying acceptance of inequality between two parties. Myths, fear, economic need, different educational levels, or a feeling of being powerless, all influenced the patient's position.

The contract now is more complicated and not based on a lack of power, as is demonstrated by the Canadian Medical Protective Association literature. Both the government and the law have increased their role in the game. Our contract in law is becoming more specific and is changing and evolving constantly.

Physician responsibility regarding informed consent is a good example of this evolution, as demonstrated by Dr. Cameron's article Consent to Treatment: Common Misconceptions appearing in this issue. Once, in our wisdom we physicians decided what was appropriate for our patients to know. Now patients demand, or in fact the law demands and stipulates, what we will or must tell the patient. Sometimes it leaves us no choice except to alarm the patient, to protect ourselves. Failure to understand this change or loss of choice and its ramifications is inappropriate to good "risk" management.

Patients' rights also are now being exercised in "living wills", where the patient outlines in some detail exactly the care he/she will or will not have in specific situations. No longer is the doctor trusted to make appropriate decisions. By writing specific instructions, this may well prevent the physician or family from doing what he/she would otherwise do. How long do these living wills pertain, and can family and changed circumstances override these directions? Regardless of the answer, it is important to note the change in our relationship.

An even more significant change is the increasing expectation that we have a very definite role in implementing public policy. The Royal Commission criticized physicians for being poor managers of the system. Most of us still only understand our contract to be with the individual patient and have never accepted any role in implementing public policy or management. Yet it is strongly implied and expected.

Public funding leads to public control of those funded. Thinly veiled as an insurance scheme, our services are paid by a government which wishes to direct us to tasks that they wish done. Rural care, specialty maldistribution, lack of data, inability to implement policy, are all problems more easily solved if we work more directly for government, rather than the patient. It is not without reason that the

number of salaried physicians in the United States and parts of Canada is rising rapidly. Whether this phenomenon occurs in Nova Scotia is of interest, and certainly means the community will exert more control over our doctor patient relationship.

Accountability to the public in general, is being reinforced by the addition of lay persons to the Provincial Medical Board, and to boards of community clinics. Lay persons have long controlled our hospital boards.

Certainly the report of College of Physicians and Surgeon of Ontario Task force on Sexual Abuse has lessened the trust between doctor and patient. The increasing number of women seeking women as doctors may reflect this. Certainly, what is reinforced here is that bringing our own agenda, whether it be sexual, racial, religious, political, has no place in a doctor patient relationship.

Even physician numbers effect our relationship, considering that there are many more physicians today than previously. "If not you, then I'll see someone else" was never possible previously. The value of anything, even a good relationship, is diminished by decreased need.

There is a sense of loss with this changing relationship that cannot be ignored. It is a loss of a simpler, easier and more rewarding time. Understanding this loss may help us to understand the present "morale" problem being felt by many physicians.

We will do well to remember that no matter what system of payment or management, no matter what the legal system, our contract is with the patient on a very personal level.

The danger in forgetting this principle is great, as the relationship becomes more complicated, and challenged by a changing society. □

Dr. David MacLean joins the Journal in this issue, and will regularly present ideas and current concepts regarding public health and community medicine. He replaces Dr. Lynn McIntyre, who has been appointed to be Dean of the Faculty of Health Professions at Dalhousie. See Personal Interest Notes.

Dr. MacLean is Chairman of the Community Health and Epidimiology Department of Dalhousie Medical School, and we welcome his participation.

J.F.O'C.

We can look at your business from a unique perspective... yours.

As a Medical Professional in the Atlantic Provinces, your computer requirements are as unique as your practice.

Clinicare specializes in Patient and Practice Management Software designed to adapt to the way you currently practice medicine.

Modular design allows you to select the right software for your medical office: from comprehensive billing, scheduling and statistical applications, to fully computerized "chartless" environments.

Over 100 physicians in the Atlantic Provinces are using Clinicare software applications. Call us toll-free at 1-800-661-8569 and find out why.

CLINICARE

ATLANTIC BRANCH OFFICES:

Halifax, Nova Scotia: (902) 422-2817
Charlottetown, P.E.I.: (902) 368-1538
Fredericton, N.B.: (506) 459-3350

Dr. Rob Stokes

PRESIDENT 1991-1992

The Medical Society of Nova Scotia

Dr. Rob Stokes, the new President of The Medical Society of Nova Scotia is very proud of his working class heritage. He speaks fondly of his father who had his education cut short by the Second World War and who suffered serious wounds during hostilities.

After recovering from his injuries, the army veteran became a steel worker in the industrial community of Rotherham, Yorkshire. It was there he married and raised two sons.

Rob Stokes, one of his sons, is candid about his childhood. He says "we were very poor," in spite of this, he considers himself to have been a lucky individual. He acknowledges that he was very fortunate to have parents who helped nurture a desire to get a good education. He is also convinced that being a "Post War Baby Boomer" was particularly fortuitous since during his formative years great expansion was occurring in Great Britain. One of the most dramatic changes took place in education. For the first time, less privileged children like Rob Stokes were offered the chance to receive much better educational opportunities.

Dr. Stokes is modest about his scholastic achievements but one quickly recognizes that he was an exceptional student. After graduating from Grammar School at 17, he applied for medical school at the University of Liverpool. He was accepted and rather wistfully he recalls that , "at 18, I was in Anatomy Class dissecting cadavers."

Looking back, the new President of The Society has happy memories of his medical training. Always athletic, he managed to find time to play rugby and attend judo classes. But he insists the best thing of all happened during his last year when he married his childhood sweetheart, Barbara. He smiles widely when he speaks of his wife and insists that she brought great stability to his life. With a little chuckle in his voice he adds, "besides she was a pharmacist and she had an income!"

After graduation from medical school at the age of 22, Rob Stokes did his internship in North Liverpool. When his internship was completed, he decided to take additional obstetrical training.

In 1974, with an M.B. and a Diploma in Obstetrics, the youthful physician was not quite ready to settle down in his native land. He and Barb decided to do some traveling. An ad they found in the *British Medical Journal* intrigued them. It offered a British physician a position at a Grenfell Mission Hospital in St. Anthony, Newfoundland. The annual salary of $10,000 (three times more than the average British doctor was earning) and the idea of practising medicine in a remote Canadian outpost convinced Rob Stokes to apply for the position.

Dr. Stokes soon found himself in St. Anthony working with Dr. Gordon Thomas, a Canadian surgeon, who was to become a close friend and mentor. A year later, Dr.Stokes accepted another challenge to go further North to work at a remote Grenfell Mission post in North West River, Labrador. There he assumed the role of a "flying doctor." This involved being flown to visit the six nursing stations that dotted the barren area. At the stations, he held clinics and occasionally performed appendectomies, D and C's and tonsillectomies.

Today, Rob Stokes remembers those days with mixed emotions. He says he enjoyed his work but was often deeply disturbed by the social problems that existed among the native population. He admits that he often felt frustrated because he could do little about serious problems such as alcoholism.

In 1976, the idea of returning to England was preempted when his colleague, Dr. Thomas decided to move to Cape Breton to build a "retirement" home. Dr. Thomas suggested that the Stokes visit Baddeck, a small community on the Island that was looking for a physician. The Stokes postponed returning home and instead took a trip to the beautiful village on the Bras d'or Lakes. The setting immediately captivated them and the fact that Barbara Stokes was expecting their first child convinced the couple to establish roots in Nova Scotia.

Today, Dr. Stokes describes his practice as being somewhat "old fashion." Working with two other physicians, he makes lots of house calls, delivers babies and when necessary,sends patients to the Victoria County Hospital which boosts a grand total of 22 rooms.

Looking back, he remembers that very soon after he arrived in Baddeck, he became very active in the activities at the Inverness Victoria Branch of The Medical Society of Nova Scotia. Obviously an enthusiastic fellow, he soon found himself on the Executive Committee. He served on the Committee during the Presidencies of Drs. Bernie Steele, Alan MacLeod and John Hamm.

With this experience under his belt, he also assumed a role with the Section of General Practice. In 1980 he joined The Society's Officers serving as its Vice-Chairman. In 1985 he became its Chairman.

In 1987, after a period of intensive participation in The Society, Dr. Stokes came to the conclusion the he needed some breathing space. The hiatus did not last very long. In 1990, he was asked to allow his name to stand as President Elect. He agreed and was elected to this position.

Looking back at the last year as President Elect, Rob Stokes reflects that it has proved to be an extremely busy time in his life. During the year he chaired a committee which has examined ways to restructure the Executive Committee. He has also chaired a Think Tank, attended the CMA's Leadership Conference and its Annual Meeting. In August, he attended the Annual Conference of Atlantic Health Organizations. In September, he flew to Boston to take a two day course in Negotiations at Harvard University. This excellent course has more than adequately help prepare him for the challenge he has accepted as a member of The Society's Negotiating Committee. He now calculates that, on average, he spent at least two days a week in Halifax working for The Society.

The new President of The Medical Society feels his "apprenticeship" has prepared him well for the coming year. One of his main goals is to improve communications with The Society's members. To do this, he plans to introduce a toll-free telephone number that will make him much more accessible to every physician in this Province.

Dr. Stokes is also committed to strengthening the branch structure of The Society. He says he will work very hard to find ways to convince The Society's members to become much more involved. "We must demonstrate that we are a profession which is committed to maintaining high quality health care for the people of this Province."

He is very anxious to play a role in making The Society a much stronger and more effective advocate for quality health medical care. He also speaks with conviction about the excellent job doctors do in preventive medicine, "G.P's do preventive medicine every day. We take blood pressures, we do immunizations, Pap smears, breast examinations. That is preventive medicine!"

Dr. Stokes, however, makes it clear that he is not interested in encouraging The Society to jump on every bandwagon. "I think as a professional group, we can not allow ourselves to be drawn into every fad out there."

He also contemplates that his tenure will, by necessity, include dealing with the harsh realties of a fiscally compromised Canadian economy, but he insists that it is important to make it clear that physicians are not prepared to allow this situation to also compromise medical standards. "I think we have to be very careful that we do not allow our practices to be dictated by economic considerations."

He views the future with cautious optimism. "I don't believe that 20 years down the road, medicine will change that much. Even if it does, we must make sure that we use technology to enhance the medical care we give, not to replace it. We have all made a commitment to our patients — to care for them and to relieve suffering."

The new President of The Medical Society of Nova Scotia has been well trained for the year ahead. He now knows that it will mean he will have less time to enjoy listening to opera, one of his favorite pastimes. He reluctantly accepts that it will be necessary to cut down on his weekly running time. And come next summer, there may not be as many opportunities to enjoy sailing trips on his 26 foot Tanzer. Nevertheless, he says he intends to make sure he does not have to sacrifice the time he spends with his wife Barb, his daughter Elizabeth who is 13, and 12 year old Matthew.

"I am a family man," he says, "I am not a workaholic. I worry about doctors that are."

Rob Stokes' philosophy will serve him well in his new role. It will also help him effectively balance the tremendous demands of his Presidency, a busy medical practice and a deep commitment to his family. It will also make the experience much more gratifying for a physician who recognizes that he will always be involved in medicine and medical politics. □

- Business and Personal Tax Planning
- Personal Financial Planning
- Preparation of Financial Statements
- Computerized Accounting Systems

Suite 1100
Cogswell Tower
2000 Barrington Street
Halifax, Nova Scotia
(902) 421-1734

Doane Raymond

Chartered Accountants

PHYSIOTHERAPY ATLANTIC

Fenwick Medical Center
5595 Fenwick St. Suite 309
Halifax N.S.

421-7549 OPEN 7 am to 9 pm

KEEPING PEOPLE IN MOTION

Consent to Treatment:

COMMON MISCONCEPTIONS

Stewart Cameron,* MD

Halifax, N.S.

The patient's right to informed consent is well established in law and medicine. Adhering to changing standards of practice in this area can be difficult for health practitioners. A review of the Consent Policy at the Camp Hill Medical Centre revealed several misconceptions among hospital staff. These included what constitutes a valid consent, responsibility for obtaining consent documents, the requirements for witnessing consent forms, the duration of consent, consent by minors, consent from relatives, and requirements of the Hospitals Act for hospitalized patients.

Lawsuits involving the issue of consent are a common source of legal actions against physicians. In addition, it is not unusual to encounter disagreements between medical and nursing staff of hospitals over consent matters. In 1989, the Camp Hill Medical Centre requested that its Joint Medical Nursing Committee formulate a new policy to advise hospital staff on Informed Consent.

The committee reviewed literature on consent, Nova Scotia Statutes, and current practice in other institutions. Some misconceptions about consent issues were encountered among hospital staff. This is not surprising because this is not a subject well covered in medical or nursing school curricula. In addition, consent practice changes as new laws are enacted and court decisions affecting how the laws are interpreted are handed down. Few busy health care providers have the time to keep up to date with events in the medicolegal arena.

In producing a comprehensive policy for our hospital, a few key areas were found that warranted particular emphasis. These will be discussed below.

The "Consent" is not the form which the patient signs for the hospital record.

The consent form is only a record which confirms that a transaction has taken place between the physician and the patient. It documents that the person to give the treatment and the person receiving it have discussed and agreed upon a course of action. The "consent form" is therefore not to be confused with the actual process of consent.

People have the right to decide on whether they will accept any proposed treatment or investigation. Patient consent is therefore required for all interventions. For minor treatment or procedures, the patient's cooperation alone is evidence of their agreement to proceed. This is called "implied consent" and it covers investigations such as blood tests, simple X-rays and treatment that presents very little risk of substantial problems.

For more serious interventions, the implications are so important that it has become necessary to document the consent process. This has resulted in the adoption of the "Consent Form". A completed consent document does not necessarily guarantee that proper consent was obtained. Similarly, the absence of the form does not mean that the process was inadequate. In practice however, hospitals require a completed consent form before major procedures are done.

The use of a form has significant limitations. It must not be used as a simple check list. In some cases the attending physician must be prepared to write a note on the chart or on the consent form detailing additional information which was discussed with the patient.

A consent must fulfill certain criteria to be valid.

The patient must give their consent voluntarily. They must also be mentally competent to weigh the information and make a decision. This ability is called *capacity.* The patient must be informed of the pertinent issues in order to make their decision. The information provided to them should include why the proposed treatment is recommended, what it is supposed to accomplish, the consequences of no treatment, and any alternative therapies. For example, a patient must be aware if they will suffer loss of a body part or function after treatment (e.g. loss of voice after laryngectomy, or inability to perform their current vocation). The patient must also be informed of complications which might befall them.

While it is a mistake to withhold information simply to avoid worrying patients, one is not required to list all potential risks and side effects of treatment. The issue is, which of the outcomes, both expected and potential, are likely to affect the patient's decision. To state this in another way, the physician must be satisfied that the patient would not be in a position to say later . . . "Had I known that information beforehand, my decision would have been different." In general, the more serious the complication, the more important to raise it when obtaining consent. Even if relatively rare, any potentially devastating result should be discussed.

Written consent is not recommended just for surgical procedures. Any medical treatment that exposes the patient to substantial risk, incurs moderate pain or leads to ablation of a body function should have the consent process documented.

*Chief, Department of Family Medicine, Chair, Joint Medical Nursing Committee, Camp Hill Medical Centre.

Correspondence: Dr. S. Cameron, Department of Family Medicine, Camp Hill Medical Centre, 1763 Robie St., Halifax, N.S. B3H 3G2

The professional performing the intervention is responsible for obtaining the patient's consent.

The health care provider responsible for the treatment or procedure is accountable for the consent process. For procedures to be performed by doctors, such as surgery, the doctor bears the responsibility for obtaining the consent. This important task usually cannot be delegated to nursing staff. Nurses generally cannot advise patients adequately about the relevant issues, because they lack the necessary medical training.

It is not unusual to have nurses and technicians performing some medical interventions, such as urodynamic studies, or the injection of contrast media. In these cases, the physician ordering the procedure should explain it to the patient. The person performing the technique should ensure that that patient understands and is in agreement.

The task of obtaining a consent can be delegated, but only to those with adequate knowledge and experience. A surgeon could probably delegate the obtaining of consent for many elective operations to a general practitioner or to a knowledgeable intern or resident. However, the physician doing the surgery is still ultimately responsible. It is the surgeon's duty to ensure that any delegation is to a person with sufficient training to adequately inform the patient and answer their questions.

Any competent adult can witness a consent.

Nurses are sometimes reluctant to sign a consent form as witnesses, assuming that this act obliges them to ensure that the process was done correctly. Witnessing a consent form only helps to document that the person signing is in fact, the patient. Any competent adult can witness a signature and it transfers none of the responsibility of consent onto the witness. If a physician and the patient both sign the consent form, there is probably no need for a third party witness, unless you suspect the patient might later deny that they had signed.

No one else can give or refuse consent for a mentally competent patient.

Patients sometimes refuse to accept the doctor's recommended course of action, or change their mind about going ahead with a procedure. The physician, believing it was in the patient's best interests, might be tempted to seek consent instead from the next-of-kin. This is unequivocally wrong if the patient is mentally competent, and makes the doctor vulnerable to assault charges and civil lawsuits. It matters not that the patient's decision seems illogical, or that the doctor's actions were made in good faith. No physician or relative can overrule the decision of a mentally competent person.

A consent does not automatically expire in time.

Some health care providers feel that a consent form must be freshly signed, in hospital, right before the procedure. If a case is postponed, they feel obliged to get another form signed. This is not necessary. A consent stays in force until the procedure is done, the patient changes their mind or the circumstances change significantly. There is nothing wrong with a physician getting the consent form filled out in the office when the patient is first seen. The form can accompany the patient into the hospital and become part of the medical record of the institution. Any substantial change in circumstances, such as a new medical illness which increases the risks of surgery, would dictate that the consent process be reopened. Some legal authorities argue that, even if the patient becomes mentally incompetent after giving a valid consent, the consent remains in force. It would still be prudent in this case to go to next of kin or someone with legal authority and seek their consent in addition.

People under age 19 can legally give and withhold consent.

There is no statutory "Legal Age for Consent" in Nova Scotia. The issue is whether the patient can fully understand the nature and implications of the proposed treatment, that is, has capacity. If the treating physician feels that the patient is capable of consenting, a note should be made on the medical record documenting their impression and the reasons for it. For patients under age 16, the written opinion of another doctor would be advisable. Naturally, it would be ideal to obtain consent from both the parents and the patient in this circumstance. However, if a 17 year old disagrees with their parents, and the doctor feels the youth has capacity, the wishes of the patient take precedence.

If a hospitalized patient is found to be incompetent, only a psychiatrist can determine if the person is capable of consenting or not.

In Nova Scotia, a literal interpretation of section 56 of the *Hospitals Act* leads to the conclusion that only a psychiatrist can determine a hospital patient's capacity to consent. Following this interpretation to the letter would seem to be both impractical and inappropriate.

The attending physician may be in a better position than a consultant psychiatrist to document a patient's altered mental state. Moreover, there are not enough psychiatrists in the province to attend to the demand if this law were followed as written.

It has been suggested that this section was meant to refer to patients in a psychiatric institution but became inadvertently applied to all hospitals. The Medical Advisory Committee of the Camp Hill Medical Centre has asked that the government of Nova Scotia amend the Act.

SUMMARY

It is the physician's responsibility to inform patients of the risks and benefits of a proposed intervention, and to allow the patient to weigh the issues and make their own decision. After obtaining the patient's agreement, the physician should document the process in the patient record for any significant interventions. Once given, consent stays in force until circumstances change. Any

competent adult can witness the signing of a consent document. No one else can overrule the decision of a competent adult, and this includes minors with legal capacity. The requirements for the consent process change over time.

ACKNOWLEDGEMENT

Gratitude is expressed to the members of the Camp Hill Joint Medical Nursing Committee, and to Mr. Rodney Burgar of the firm Patterson, Kitz, for their role in developing the Medical Centre's policy and for assistance with this paper.

ADDITIONAL READING:

Rozovsky LE, Rozovsky FA, *The Canadian Law of Consent to Treatment.* Toronto: Butterworth and Co., 1990.

Consent, A Guide for Canadian Physicians. The Canadian Medical Protective Association, Ottawa, 1989.

wordPro Word Processing Services

High Resolution Laser Printing

Tali Roebuck

Mic Mac Postal Outlet
Box 24035 Dartmouth, N.S.
B3A 4T4

(902) 465-3587

EMPLOYMENT OPPORTUNITY

"DIAGNOSTIC RADIOLOGISTS" Challenging clinic practice opportunities available in Sudbury, Woodstock, and Windsor, Ontario. Short or long-term contract negotiable. Early opportunities for equity participation. Contact Mrs. A. Marshall, Diagnostic Imaging International, 1720 Howard Ave., Ste. 366, Windsor, Ontario N8X 5A6."

Is it actually worth buying this Poggenpohl?

It's worth every penny. This new "Work Time" model offers everything that distinguishes a genuine Poggenpohl: top design, intelligent technical features, perfect workmanship. As you can see for yourself, in our showroom.

poggen pohl

1592 Queen Street, Halifax
422-6689

Exclusive distributors for Atlantic Canada

Professional Office Suites

* Minutes from hospitals/universities.
* Excellent public transportation.
* Quaint, friendly environment.
* Reasonable rates-low operating.

Quality throughout in this modernized Heritage property.

Marie Seaward
423-2733
1-800-565-1204
After Hours: 462-1292

Patients' Attitudes and Expectations on Entering The Nova Scotia Hospital

Lakshmi N.P. Voruganti,* MD, FRCPC and Barbara S. Clark,** PhD

Halifax, N.S.

Scientific progress in psychiatry and the community care movement have lead to the decline of traditional mental hospitals. Patients' attitudes and expectations are relevant in this context, to identify and reshape the future role of these institutions in the modern health care delivery system. In a pilot survey, three hundred and twelve patients were interviewed at the time of admission to the Nova Scotia Hospital and their attitudes, both favourable and unfavourable, encompassing a wide range of issues, identified. A second sample of one hundred and eighty-five patients were further assessed recording the frequency of various attitudes and patients' characteristics. Safety issues, relief from stressful environment and quality care were mentioned favourably while hospital milieu, personal rights and social stigma were the main causes for concern. Being young, male and a lack of previous psychiatric admissions were associated with favourable expectations. Implications of the study were discussed.

The history of psychiatry is closely intertwined with the history of asylums and the "stigma" attached to them. If "asylum" was an embodiment of the nineteenth and twentieth century psychiatry, scandal and stigma followed as it's shadow.[1] However recent reviews of the origins and intended functions of asylums have highlighted their positive role in the care of the mentally ill.[2,3] Further, a description of the evolutionary history of asylums over the past two centuries illustrates their changing role in the mental health delivery system, which reflects the growth of psychiatry.[4] Confinement and "moral treatment" have given way to biological, psychoanalytic and social treatments transforming the pattern of delivery of psychiatric care. A Community Psychiatry movement has broadened the focus of attention from hospital-based programs to include community-oriented services. The asylum, as constituted in the past, is dead. A new definition of "mental hospital" is emerging which will continue to be reshaped on the basis of public needs and attitudes.[5]

Among health care professionals, there has been a growing awareness and appreciation of patients' subjective feelings about and experiences of psychiatric hospitalization, with attempts to modify policies and practices accordingly.[6] Patients' attitudes towards psychiatric hospitalization and related aspects received considerable attention in the past four decades, passing through three distinct stages. The earliest studies[7], described as "qualitative" by Weinstein[8], were often either anecdotal, highlighting individual cases, or purely observational, confining themselves to visitors' subjective impressions.[9] These reports were often critical and one-sided, projecting a negative image of the mental hospitals. Rectifying these limitations, a spate of quantitative studies followed which were scientific in approach, relatively sound in methods and objective in interpretation.[10-13] However, they remained generally descriptive or "phenomenological" in their efforts, to establish the nature of patients' attitudes and identify those elements related to them. A wide range of methods were employed, the benefits and shortcomings of which have been reviewed elsewhere.[8] More recently, the reality of budgetary limitations has prompted administrators and health economists to pursue quality assurance programs, centered around the issues of "consumer satisfaction" and "performance indicators".[14] This generation of studies is more closely defined in terms of objectives and patient population, stringent in measurement and primarily geared towards programme evaluation. Methodological issues involving these recent developments have been reviewed by el-Guebaly.[15] These trends indicate considerable progress in the field with continuing refinement of research methods and implications.

Nova Scotia was later than some to follow these trends in the mental health movement.[16,17] A Provincial Hospital for the Insane was established in 1858, which was later developed and renamed as The Nova Scotia Hospital in 1902.[18] During it's 133 years of existence, the hospital has remained the principal mental health facility for the entire province. Revolutions in the broader arena of psychiatry also influenced local activities and practice. Early introduction of "moral treatment" approaches, the successes and failures of somatic therapies and the addition of the psychosocial dimension to care of the mentally ill have been described by Purdy.[19] A school of nursing was established as far back as 1894 and later, the hospital became affiliated with Dalhousie University, flourishing into a major centre for teaching and research in Psychiatry. Over the years, training programmes have been developed in Undergraduate and Postgraduate Psychiatry, Nursing, Social Work, Dietetics and Pastoral Care.[20]

*Director of Assessment and Admissions Department, Nova Scotia Hospital, Dartmouth, N.S. Assistant Professor, Department of Psychiatry, Dalhousie University

**Psychological Consultant, Division of Child Psychiatry, I.W.K. Children's Hospital, Halifax, N.S. Associate Professor, Department of Psychiatry, Dalhousie University

Correspondence: Dr. L N P Voruganti, Dept. of Psychiatry, The Wellesley Hospital, 160 Wellesley Street East, Toronto M4Y 1J3.

The "N.S." as it is popularly known, symbolizes the state of mental health care in the province, its brighter and darker sides. Patients' lives, their aspirations and frustrations are closely associated with the history of the hospital. However it is not clear if changes in the status and activities of the hospital have resulted in changes in public attitudes and a lessening of the stigma associated with it's background. Except for some anecdotal accounts and news items in the media, no history exists of the attitudes of the patients, the relatives or the general public towards the hospital or its services. With the development of regional mental health facilities and changing needs of local populations, an attempt was made in 1990 to delineate the role of this hospital in the provincial health care delivery system.[21] However, the study was not specifically aimed at examining public attitudes and did not consider the issue of consulting patients or relatives. In view of the progress in research described above, significant deficiencies exist in our knowledge and understanding of the patients' and public's perceptions of the local mental health services and The Nova Scotia Hospital.

This article describes a study to determine, record and examine patients' attitudes and expectations at the time of entering The Nova Scotia Hospital. The study was conducted in two phases. Phase I was a pilot survey aimed at eliciting the range of patients' attitudes and expectations and Phase II examined the prevalence of various attitudes and variables possibly affecting their distribution.

PHASE I

The hospital has a centralized admissions department operated on a 24-hour basis, where patients receive a comprehensive physical and psychiatric evaluation prior to admission. Seven hundred and eighty-three patients were admitted in the fall and winter of 1989, of whom 312 were assessed during the day shift. The author, in his capacity as admitting psychiatrist, had opportunity to interview these patients for the purpose of this study.

Attitudes were determined through a direct interview, as a part of the clinical assessment. Exploring "insight" by eliciting patients' attitudes towards the illness and hospitalization is a part of the traditional mental status examination upon admission. This part of the interview was elaborated to suit the needs of the present study. Specific questions were asked soliciting patients' opinions about the hospital and their expectations of the admission. The interview started with a non-directive open enquiry and proceeded through a more focused and directive questioning. For examples of the questions, see Appendix.

Confidentiality of the information was assured at the beginning of the interview and patients' anonymity was guaranteed for the purposes of this study. Patients were encouraged to describe their feelings and identify specific issues, rather than passing global judgements. Responses were recorded verbatim and were later analyzed in terms of their content and polarity. No attempt was made at this stage to take patients' characteristics into consideration.

RESULTS

The content of the descriptions were often very clear and polarized, enabling the responses to be broadly categorized as "Favourable" and "Unfavourable". It was further possible to identify specific themes contributing to this polarity, as summarised in Tables I and II.

TABLE I

SUMMARY OF UNFAVOURABLE ATTITUDES AND EXPECTATIONS OF PATIENTS.

* **Hospital Milieu**
  - Fear of being put in a room with other "mental patients".
  - Fear of getting locked-up/put behind bars/in chains etc.
  - Fear of having to stay with mentally ill offenders ("Criminals")
  - Concerns about physical environment (poor hygiene and unattractive surroundings), food, distance etc.

* **Personal Rights**
  - Fear of losing freedom/rights
  - Lack of privacy
  - Restrictions on making phone calls, going out etc.
  - Confidentiality i.e., fear of being discussed, publicity and being watched by strangers.

* **Physical Consequences**
  - Fear of getting harmed/attacked by other patients
  - Fear of catching diseases eg: AIDS
  - Fear of dying in a mental hospital

* **Psychological Consequences**
  - Admission to the hospital meant admission of "defeat"
  - Fear of getting influenced by other patients' problems, leading to a worsening of patient's condition
  - Fear of losing control of self ("Going mad")
  - Fear of never getting out of the hospital
  - Fear of committing suicide in the hospital
  - Fear of losing money, skills etc.
  - Fear of picking up bad habits
  - Fear of facing inner mental conflicts brought out during therapy

* **Social Consequences**
  - Fear of not being visited by relatives
  - Fear of being forgotten
  - Fear of being rejected by relatives
  - Fear of being divorced
  - Fear of what others may think
  - Fear of losing employment or not getting employed
  - Fear of not getting accommodation due to prejudice

* **Maltreatment**
  - Not being given time to talk/explain
  - Fear of being "doped" with drugs
  - Fear of being given E.C.T. against one's will
  - Fear of receiving injections
  - Fear of being examined by students, trainees etc.
  - Fear of being ill-treated by staff
  - Fear of being used as a "guinea pig" in research and experiments

* **Professional Expertise & Image**
  - Not getting the best possible modern psychiatric help
  - Not getting attention on physical health matters
  - Psychiatrists are not "real doctors" and nurses are not "real nurses"

TABLE II

SUMMARY OF FAVOURABLE ATTITUDES AND EXPECTATIONS OF PATIENTS.

* **Safety**
  Prevention of suicide
  Control of aggressive behaviour
* **Professional Help**
  Seeing trained staff with expertise in the field.
* **Assessment**
  Comprehensive examination of physical, psychological and social aspects.
* **Medication & E.C.T.**
  Choice, review or readjustment of dosage.
* **Psychotherapy**
  Emotional support, guidance etc.
* **Rest**
  Physical and Mental rest
* **Protection From Stress**
  Escape from stressful environment
* **Interpersonal Learning**
  Seeing and learning from other patients
* **Gaining Insight**
  Better understanding about problems
* **Miscellaneous**
  Overcoming a habit
  Getting a "free" hair cut
  Meeting a partner

Some of the descriptions pertain to patients' expectations of the current hospitalization, while others reflect global views on the hospital and mental health services in general.

Unfavourable responses were characterized by frequent references to the stigma of psychiatric hospitalization and alleged "horrors" of mental hospitals. Descriptions of poor hygiene, archaic custodial practices, restrictive environment and regimental attitudes of staff seemed to be taken directly from writings of the past, reflecting a mixture of fantasy and reality.[7] Several negative attitudes suggested the prevalence of ignorance and perpetuated myths. Frequent references to the "locked wards" and "punishment" therapies showed deficiencies in public knowledge about the changing practices of the hospital. "Am I allowed to keep my clothes?", "Is my husband allowed to visit me?" and "Do I get a room for myself?", are some of the examples. Patients were also often concerned about the widely publicized role of the hospital as a detention centre for mentally ill offenders. Some were unaware that the facilities are mutually exclusive and segregated. Concerns about somatic treatments e.g., indiscriminate use of medications and electroconvulsive therapy (E.C.T.) were often voiced. "I don't want my brains to be fried", and "I am scared of getting zonked with drugs", were frequently heard. The prospects of having to stay in the hospital for the "rest of one's life", and "dying in a mental hospital" again fail to reflect the progress of modern psychiatry. Finally fears of social rejection are a sad, but realistic reflection of the still existing prejudices and stigma attached to mental illness and hospitals.

Among the patients with favourable attitudes, the sense of gratitude and indebtedness is very striking. "But for the help I received here, I would have been a dead person long ago", one of the patients commented on readmission. The effectiveness of this hospital as a tertiary referral centre was often quickly acknowledged. "I know this is where it can be fixed" was frequently expressed belief. Assessment and diagnosis, readjustment of medications and rehabilitation were often correctly described as the particular function of the hospital. However visions of marathon psychotherapy sessions and intense short term attempts to rebuild deviant personalities often reached magical proportions, reflecting inappropriate expectations. Some were convinced that they could "kick" a habit during their stay, while others hoped to come across a suitable partner in this special setting! The virtues of the staff were often mentioned but focused on experience and tolerance rather than expertise or special skills. Finally, despite all the limitations, the hospital seemed to serve the functions of a literal "asylum" through providing an unconditional, uncritical and tolerant environment.

PHASE II

During the Spring of 1990, two hundred and four patients, between the ages of 18 and 65 admitted with general psychiatric problems during the day shift were assessed for this phase of the study. Nineteen of them were excluded due to unsuitability to proceed with an appropriate clinical interview (reasons include aggressive behaviour, stupor, advanced dementia etc.). One hundred eighty-five patients (40% of all admissions over a three month period), were able to finish the interview and were included in the study.

Sample Description

Males (50.2%) and females (49.72%) were equally represented in the sample as were urban (52.43%) and rural (47.57%) areas. The age distribution of patients in various groups was as follows: Young (18-25) 19.45%; young adults (26-45) 49.72%; and middle-aged (46-65) 30.6%. Re-admissions were higher (58.37%) compared with the first admissions (41.62%). Legal status at the time of admission indicated that a majority were admitted voluntarily (62.16%) as opposed to committals (37.83%). Diagnostic breakdown (D.S.M. III-R) of the sample was: Schizophrenia 20.5%; Mood disorders 42%; Alcohol-related problems 6%; Adjustment disorders 7%; Personality Disorders 11%; and other conditions 13.5%.[22]

The majority of patients (64.86%) had had first hand experience with mental health facilities locally or elsewhere, while others (14%) had had contact through visiting relatives or friends admitted to the hospital in the

past. Some became aware of the facility through the media (11.89%), and it was only a small proportion of patients (9.18%) who had no knowledge or contact at all with the mental health services. Impressions based on past contact were often unfavourable (46.42%) as compared to favourable (30.95%), or mixed (22.6%) feelings.

METHOD

From information already available on the range and nature of attitudes and expectations, a semi-structured interview protocol was developed facilitating systematic data collection and recording. The contents included: socio-demographic factors such as age, sex and domicile (urban or rural); voluntary or involuntary status at admission, first or readmission, clinical diagnosis, and a list of favourable and unfavourable expectations. The interview also obtained information on past knowledge and contact with this hospital or mental health services in general.

To identify the potential determinants or various attitudes, data were processed by the computerized statistical package SYSTAT. Associations between attitudes and other variables were tested using a Pearson correlation matrix and Chi-square tests.

RESULTS

The prevalence of patient attitudes and expectations by admission is listed in Table III.

The relationship between attitudes and other variables are summarized in Table IV indicating statistically significant differences.

TABLE III

PREVALENCE OF VARIOUS ATTITUDES AND EXPECTATIONS AMONG PATIENTS BY ADMISSION.

	First Admissions	Re-Admissions
Unfavourable attitudes and expectations		
Hospital milieu	48%	78%
Personal rights	62%	44%
Physical consequences	42%	40%
Social consequences	31%	52%
Maltreatment	18%	31%
Psychological consequences	15%	18%
Professional expertise	21%	4%
Favourable attitudes and expectations		
Physical & mental rest	54%	69%
Safety	62%	84%
Environmental manipulation	73%	61%
Assessment	41%	52%
Medication & E.C.T.	22%	48%
Professional help	24%	42%
Psychotherapy	38%	11%
Interpersonal learning	0%	2%
Gaining insight	12%	1%
Miscellaneous	0%	2%

TABLE IV

RELATIONSHIP BETWEEN PATIENTS' ATTITUDES AND SOCIO-DEMOGRAPHIC AND CLINICAL CHARACTERISTICS.

	Exclusively Favourable	Exclusively Unfavourable	Mixed	Significance
Age				
18-25	22	5	10	p=0.007
26-45	25	18	45	
46-65	15	13	32	
Sex				
Male	41	14	38	p=0.008
Female	21	22	49	
No. Admissions				
First	33	10	26	p=0.006
Re-adm.	29	26	61	
Legal Status				
Certified	24	14	32	N.S.
Voluntary	38	22	55	
Domicile				
Rural	26	15	40	N.S.
Urban	36	21	47	
Diagnosis				
Schiz.	17	11	16	N.S.
Mood Dis.	14	18	32	
Alcoholism	13	1	4	
Adjust. Dis.	1	3	2	
Pers. Dis.	7	2	13	
Others	10	1	20	

Age, sex and previous psychiatric admissions influenced the polarity of patients' attitudes significantly. Youth, males and an absence of previous admissions were associated with favourable expectations while older patients, females and those with past admissions to the hospital, expressed predominantly mixed or unfavourable attitudes. The legal status at admission, urban or rural residence or clinical diagnosis were not significantly related to attitudes about hospitalization.

DISCUSSION

There are no published data on patients' or the public's attitudes towards mental health issues in Nova Scotia. The scope and limitations of the methodology have to be considered within this context. A descriptive design seemed more appropriate in this study to elicit themes and variations specific to the local population and to ensure that culture-specific issues would be identified. Standardized rating scales developed elsewhere have not been used for these reasons.[23] Forty percent of all consecutive admissions were included in the study and the sample is fairly representative of the population admitted to the Nova Scotia Hospital. The author has reported elsewhere that there were no consistent differences between patient populations admitted at different times of the day.[24] Presumably, the limitations of sampling did not affect the results.

Traditionally, researchers have doubted that patients' opinions were reliable or relevant, in view of existing psychopathology, severity of illness or other psychodynamic issues in operation.[23] However, it has been demonstrated in other studies, as well as in this study, that patients tend to take such interviews seriously and are able to focus appropriately on issues of mutual concern.[26] Further, Weinstein has argued that interviews using open questions, as opposed to projective or indirect techniques, have "face validity" as they directly address the issues in which the investigator is interested.

The content of patients' descriptions and the polarity of attitudes have been noted in other studies. Weinstein, summarizing the results of eighteen studies, observed that "polarity" and/or rating on a continuum was commonly found e.g. positive-negative, helpful-harmful or favourable-unfavourable. However, considering the large proportion of patients expressing "mixed" nature of attitudes in the Nova Scotia, it is intriguing to note that several of the previous studies had not employed a "mixed" category in their reports. Allen *et al.*, for example, categorized their patients' responses as positive, negative and neutral.[26] Linn observed that 55% of his patients had favourable attitudes, 39% had unfavourable attitudes and only 4% were described as "ambivalent".[11] Weinstein also looked at the content of patients' responses in all the studies and categorized them into six groups: treatment, restrictions, organization, amenities, staff and patients. Our patients' responses too seem to fall broadly into these categories with variable distributions.

The association of older patients and past admissions with unfavourable attitudes seems to reflect the unfortunate heritage of mental health services. The generation of patients who are middle-aged or elderly now, are probably most affected by the irregularities of past psychiatric practices, some realistic and some fictional. The perceived stigma attached to mental illness and treatment most certainly has influenced their attitudes. The inclination of female patients to express more unfavourable attitudes seems more complex, however. Diverse and sometimes conflicting results have always been a feature of research in this field. Linn, using a similar method, studied the association between patients' attitudes and a variety of clinical, social and psychological characteristics related to the admission. He found no significant relationship between patients' attitudes and factors such as the number of previous admissions, the distance one has to travel to come to the hospital and whether it was a first admission or re-admission. However there were significant associations between: negative attitudes and involuntary admission; being female; married; having a rural domicile and a non-alcoholic background. Weinstein reviewing the literature concluded that, in general, variables "intrinsic" to mental illness or hospitalization such as the nature and severity of illness, legal status on admission, the length of hospital stay and the success of treatment seem far more important determinants of attitudes than "extrinsic" variables such as socio-demographic characteristics.[8]

Exploring patients' attitudes and expectations can have far-reaching implications for clinical, administrative, training and research matters.[26] Decisions regarding admission, length of hospitalization, discharge, follow-up and treatment issues can vary significantly with the knowledge of patient's attitudes. Administrative matters such as budget allocations, staff deployment and physical alterations can benefit from this feedback system. The data may also point out significant lacunae in clinical programming, staff training needs and potential areas for research. Public health education, aimed at dissemination of information and lessening the stigma, is another wider challenge for all the professionals involved in the care of the mentally ill.

The information obtained in this study forms a descriptive data base and should be viewed as a preliminary step in research into this complex and potentially useful field. There is considerable scope for extending this work in other directions. Implications of this study with special reference to the role and functioning of the Nova Scotia Hospital range from the modernization of physical structures, to ensuring a better quality of care as well as a broader community orientation. However, it is encouraging to see that an overwhelming majority of patients consider this setting as unique and wanted. The message seems to be to "recycle" the original concept of asylum to suit present day requirements. □

ACKNOWLEDGEMENT

The authors wish to thank Dr. David Whitehorn for his help with the data processing.

APPENDIX

EXAMPLES OF QUESTIONS ASKED:

Open non-leading (Non-directive) questions:

"May I ask how you feel about coming into The Nova Scotia Hospital?"

"Do you have any feelings about being admitted to The Nova Scotia Hospital?"

Open leading questions:

"Do you have any concerns about getting admitted to The Nova Scotia Hospital?"

"Does it worry you that The Nova Scotia Hospital is a psychiatric institution/mental hospital?"

"How do you consider this admission as beneficial?"

Closed (Directive) questions:

"Do you have any concerns about staying in a unit with other mental patients?"

"Do you consider the use of medications as important in your treatment?"

References

1. Fabrega H. The culture and history of psychiatric stigma in early modern and modern western societies: A review of recent literature. *Compr Psychiatry* 1991; **32 (2):** 97-119.
2. Wing JK. The functions of asylum. *Br J Psychiatry* 1990; **157:** 822-827.

3. Vogel W. A personal memoir of the state hospitals of the 1950s. *Hosp Community Psychiatry* 1991; **42(6):** 593-597.

4. Maxman JS, Tucker GJ, LeBow MD. *Rational Hospital Psychiatry: The Reactive Environment.* New York: Brunner/Mazel, 1974.

5. Ahmed PI, Plog SC. *State Mental Hospitals, What Happens When They Close.* New York. Plenum Medical Book Company, 1976.

6. Souelem O. Mental patients' attitudes towards mental hospitals. *J Clin Psychol* 1955; **11:**181-185.

7. Goffman E. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates.* New York: Doubleday & Co., 1961.

8. Rosenhan DL. On being sane in insane places. *Science* 1973; **179 (1):** 150-158.

9. Weinstein RM. Patient attitudes toward mental hospitalization: A review of quantitative research. *J Health Soc Behav* 1979; **20:** 237-258.

10. Klopfer WG, Wylie AA, Hillson JS. Attitudes toward mental hospitals. *J Clin Psychol* 1956; **12:** 361-365.

11. Kahn M, Jones NF, MacDonald JM, Conners CK, Burchard JA. Factorial study of patient attitudes toward mental illness and psychiatric hospitalization. *J Clin Psychol* 1963; **19 (2):** 235.

12. Linn L. The mental hospital from the patients' perspective. *Psychiatry* 1968; **31 (3):** 213-223.

13. Gregoire PA. The phenomenology of psychiatric hospitalization: The patient's experience and expectations. *Acta Psychiatr Scand* 1990; **82:** 210-212.

14. Lorefice LS, Borus JF. Consumer evaluation of a community mental health service. *Am J Psychiatry* 1984; **141 (11):** 1449.

15. el-Guebaly N, Toews J, Leckie A, Harper D. On evaluating patient satisfaction: Methodological issues. *Can J Psychiatry* 1983; **28:** 24-29.

16. Goldman DL. Dorothea Dix and her two missions of mercy in Nova Scotia. *Can J Psychiatry* 1990; **35:** 139-143.

17. McInery O. The beginnings of Nova Scotia Hospital. *InforMed* 1988; 21-22.

18. Bell W. Hon. Hugh Bell – A geneological study II 1962. Unpublished.

19. Purdy EC. Nova Scotia Hospital history 1976. Unpublished.

20. McCormick WO. The history of psychiatric education at Dalhousie University. Presented in symposium – "The history of psychiatric education in Canada". Canadian Psychiatric Association Annual Meeting, September 1990.

21. Nova Scotia Hospital. The Nova Scotia Hospital role study. 1991. Unpublished.

22. The American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders,* Third edition, revised 1987. The American Psychiatric Association, Washington DC.

23. Reznikoff M, Brady JP, Zeller WW. The psychiatric attitudes battery: A procedure for assessing attitudes toward psychiatric treatment and hospitals. *J Clin Psychol* 1959; **15:** 260-266.

24. Voruganti LNP. Patterns of psychiatric admissions during Christmas. Under publication.

25. Small I, Small J, Estevez C. Do patients tell it like it is? *Dis Nerv Syst* 1969; **30:** 333-338.

26. Allen JC, Barton GM. Patients comments about hospitalization: Implications for change. *Compr Psychiatry* 1976; **17 (5):** 631.

ACUTE CARE MEDICINE COURSE
SPONSORED BY
THE DARTMOUTH GENERAL HOSPITAL

SATURDAY, APRIL 04, 1992

RAMADA INN, BURNSIDE BUSINESS PARK

Block Your Calendar - Bring A Colleague

TOPICS WILL INCLUDE:

Morning Session Program

0845 - 1015 "Palliative Care"
1045 - 1215 "Paediatric Trauma"
- Fractures (Dr. John Hyndman)
- Burns (Dr. Camilla Forsythe)
- Child Abuse-Sexual (Dr. John Anderson)

Afternoon Session Program

1345 - 1410 "Emergency Room Therapeutics"
- Approach to the Unconscious Patient (Dr. Ed Cain)
- Diabetic Emergencies (Dr. David Maxwell)

1410 - 1430 Panel Discussion
1430 - 1500 "The Politics of an Illness" (Dr. Reg Yabsley)
1530 - 1730 Clinical Sessions

Series 1 (1530 - 1630) (Select I)

A) ACLS *Update* (Drs. Ken Bucholz & Pat Croskerry)
B) Management of Aute Orthopedic Problems (Drs. Gary McGillvary & Bill Canham)
C) Radiology in the Emergency Room (Dr. William Barton)
D) Intraosseous Infusions Workshop (Dr. Katherine Cox)

Series 2 (1630 - 1730 (Select 1)

A) Assessment of Breast Lumps (Drs. Virginia Calverley & Don Cheverie)
B) Management of Intrapartum & Postpartum Emergencies (Dr. Joseph O'Keane)
C) EKG Interpretation (Dr. Dale McMahon)
D) Joint Injections: Indications & Techniques (Dr. Diane Theriault)

To Register Contact:
Diane Smith, Education Co-ordinator
Dartmouth General Hospital
325 Pleasant Street
Dartmouth, NS B2Y 4G8
PHONE: (902) 465-8525

PROCEEDINGS OF
27TH MEETING OF COUNCIL
and
137TH ANNUAL MEETING
of

The Medical Society of Nova Scotia

Halifax
November 22-23, 1991

THE MEDICAL SOCIETY OF NOVA SCOTIA PROCEEDINGS OF 27th MEETING OF COUNCIL 138th ANNUAL MEETING November 22-23, 1991

The 27th Meeting of Council began as the Medical Society Officers, accompanied by Dr. Carole Guzman, C.M.A. President, Division Presidents, and Executive Director paraded through Council Chambers to the head table. Following call to order by Dr. George Ferrier, Chairman of the Executive and General Council, the Officers were introduced and Dr. Guzman brought greetings from The Canadian Medical Association.

Mr. R.J. Dyke, Executive Director, read the names of Society members deceased since October 1, 1990 as follows: Dr. William W. Bennett of Bridgewater; Dr. Douglas C. Cantelope of Lunenburg; Dr. Joseph F. Cantwell of Kingston; Dr. Charles David of Dartmouth; Dr. Peter D. Ferguson of Dartmouth; Dr. David Gwyn of Halifax; Dr. Margaret E.B. Gosse of Halifax; Dr. J. Donald Hatcher of Kingston, Ont.; Dr. Noel J. Jackson of Lockeport; Dr. Neil MacLennan of Sydney; Dr. Francis J. Misener of Kentville; Dr. William E. Pollett of Halifax, Dr. Harold Scammell of Halifax; Dr. William A. Taylor of Bridgewater; and Dr. Charles Weld of Halifax.

The Transactions of the 26th Meeting of Council and 137th Annual Meeting (1990) as printed in the December 1990 issue of The Nova Scotia Medical Journal were approved.

Council approved a motion that the narrative of all reports reports be received for information.

These Transactions are a concise record of reports which were presented and the decisions arising therefrom. It may be necessary for the reader to refer to Reports to Council (1991) for detailed background information. The Reports are available through the Society office, all Branch Societies, and members of Council. All information is available for viewing at the office on reasonable notice.

REPORTS

President's Report

In speaking to his report, Dr. Canham highlighted a few of the many issues in which The Society had been involved during his tenure as President — Bill C-69, Peer Review, Negotiations, the Barer Stoddart Report, Patient Sexual Abuse, and Society participation in Ministerial Task Forces.

Speaking to Bill C-69 and its effect on the health care system, the President thanked the C.M.A. for its efforts in developing a national consensus to guarantee equitable funding for health care in this Country. Dr. Canham was pleased to inform Council that The C.M.A. is recommending a national standard of health care that is appropriately funded. He stressed that medical associations must expand to help doctors deal with ever-increasing professional demands and to provide better social and emotional support for physicians.

The President informed Council that the Building has come through its first winter with a minimum of problems. He drew Council's attention to the need the building has fulfilled for the medical community, noting that there are few evenings and weekends that this facility is not used.

Speaking to paragraphs 407 and 408 of his report, Dr. Canham reiterated his belief that peer review processes presently under development will have significant impact on practitioners in the near future. The Society is looking forward to a process that is primarily educational rather than punitive in emphasis. Dr. Canham outlined for Council how this process had been gradually brought into being in Ontario over ten years noting its positive if cautious reception. Discussion ensued concerning Peer Review as to its purpose, who should be involved, who should pay for it, etc. In discussion of its purpose, concerns were expressed that is might be inapppropriately used for purposes other than quality of care (e.g. - restricting physician supply). It was the consensus of the meeting that peer review should be done by peers and be conducted independent of government.

In conclusion, Dr. Canham thanked Society Staff, Officers, and Branch Representatives for their support during the past year. He also extended specific thanks and appreciation to Drs. LeRoy Heffernan, Rick Gibson and Alan Cohen for their hard work on economic matters on behalf of The Society.

Executive Committee Chairman

Dr. Ferrier noted his report is found of pages 10-11 of Reports to Council and has been received for information. Dr. Ferrier commended to Council the incoming Chairman, Dr. Shelagh Leahey of Yarmouth, citing her extensive knowledge of The Society.

Executive Director

In speaking to his report, Mr. Dyke reiterated a broad theme from the President's Report: The Society is under ever-increasing demands to be responsive and to participate in changing the health care system. The positive side is the recognition that physicians play an important role in the system and must be part of resolving any problems; unfortunately, this requires increasing commitment of both time and financial resources. Balancing off these factors will be The Society's greatest challenge in the coming year. In conclusion, he thanked the President and Society Officers for their steadfast support through the challenges of the past year. He expressed the opinion that they have served The Society well and deserve the full recognition of their peers.

Economics Committee

Dr. W.H. Lenco, member of the Economics Committee, presented the Committee's extensive written report on Saturday morning on behalf of the Chairman, Dr. LeRoy Heffernan. During presentation he noted that the agreement for Contract Psychiatry was implemented in April 1990 and involves approximately 72 physicians at full and part time activity levels. Currently the first year of the operation is under review by the Insured Services Division of the Department of Health. Several other groups have expressed an interest in a contract similar to that of the psychiatrists but progress or acceptance of new arrangements hinges on the results of the Insured Services Division's review.

In speaking to his report Dr. Lenco drew Council's attention to the outcome of Maritime Medical Care's audit of all physicians utilizing Institutional Visit fee codes, noting that as a result of a co-ordinated appeal by the Economics Committee MSI had decided to suspend the audit . No additional money will be recovered from physicians, and all funds previously withheld will be returned as soon as possible.

It was noted in the report that before The Society embarks upon a full-scale Relative Value Guide project that the progress of other provincial associations be studied closely and other potentially simpler, alternatives be considered. This approach had been the consensus arising out of inter-sectional Think Tanks. During the next few months The Society will continue to direct its efforts to determine the best way to achieve The Society's goal of improving economic relativity. Productive discussion of related issues followed.

One member stressed amazement at the amount of information he had gathered this morning and expressed concern that perhaps the membership is not as informed as it could and should be, and asked if this problem has been addressed. Dr. Lenco responded noting that there have been many attempts to improve communications over the past year and that these continue.

Council heartily supported the work of the Economics Committee on their behalf and offered both condolences and congratulations.

Negotiating Committee

This report was presented by Drs. Bill Canham, Alan Cohen, Rick Gibson, Peter Jackson, Rob Stokes and Mr. Richard Dyke in a closed session Saturday morning. Dr. Canham opened the presentation by introducing The Society's negotiations team. He emphasized the diversity, experience, and expertise of the members. He informed Council of the excellence of the government's negotiations team drawing attention to its broad based membership from within the Department of Health (i.e. - Professional Services, Pharmacare, Institutions Division).

Following on, Dr. Cohen first expressed thanks to his colleagues at the Victoria General who are picking up the slack, thus allowing him to serve on The Society's Negotiations Team. He outlined for Council the training the team had received at the Harvard negotiations course. He described the negotiations process to date.

Dr. Gibson briefly ran through for Council an economic environmental scan — national trends, the impact in Nova Scotia, and the situation for Nova Scotia physicians.

Dr. Cohen informed Council on the broad issues and principles involving negotiations. Dr. Jackson outlined for Council probable benefit areas to be negotiated.

Dr. Stokes concluded the presentation by emphasizing: the determination of the team to get the best possible deal; an interest to work with membership on specific issues; and a desire to address long standing issues and concerns.

The presentation was well received by Council. Constructive debate followed with many members speaking out on the issues raised.

Resolution #1

"THAT the Economics Committee study and produce a proposal for the Negotiations Committee regarding a Retirement Package for Nova Scotia physicians." CARRIED.

The Negotiations Team were thanked for their informative presentation.

Archives Committee

This report was presented by Dr. Ian Cameron, Interim Chairman. In speaking to his report he noted that the Archives Committee had accomplished its goal of working closely with the Joint Archives Committee to produce three policy documents relating to the Medical History Museum of Nova Scotia. The documents include a Mission Statement, A Collections Management Policy, and a Memorandum of Association. Dr. Cameron noted that a large part of the Medical Archivist's time is spent managing the collection which now has a catalogue value approaching one million dollars. Concluding his remarks, Dr. Cameron made reference to the large number of acquisitions during the year, one of the most interesting being a Harvard Operating Table which was donated by Dr. Wile Verge and dates from approximately 100 years ago, and the only one of its kind in Nova Scotia.

Dr. Cameron's report contained two resolutions:

Resolution #2

"THAT Dr. Eugene Nurse be named Chairman of the Archives Committee." CARRIED.

Resolution #3

"THAT The Medical Society continue to fund its share of the Medical Archivist's salary." CARRIED.

Building Committee

In speaking to his report Dr. Hamm noted that he was pleased to report that his committee has operated within its budget despite the inclusion of some unplanned expenses. He informed Council that The Society has been provided with a yearly site maintenance program as well as a master plan for developing the property. The ornamental and decorative plantings described in the master plan have been completed, the pathways constructed, and planters installed on the deck.

Dr. Hamm expressed pleasure that Dr. Ian Cameron and Mr. Jeff Pike (landscape architect from Reinhart L Petersmann Landscape Architect Limited) have volunteered to carry out the final recommendations of site development. This includes the identification and some relocation of medicinal plants on the site. A system of proper identification of these medicinal plants will be developed.

Dr. Hamm announced that The Society has reason to be proud in that the landscaping concept of the site including the medicinal plant identification has received international attention and has already been the subject of several articles. The Building itself on October 9, 1991 was awarded the Beautification Award from the City of Dartmouth. Sperry/MacLennan are to be congratulated in this regard.

Resolution #4

"THAT the Building Committee be dissolved." CARRIED.

Resolution #5

"THAT a site development committee be struck.. The terms of reference of the committee to include completing the recommendations as provided in the master plan by Mr. Jeff Pike." CARRIED.

Resolution #6

"THAT Dr. Ian Cameron be named Chairman of the Site Development Committee." CARRIED.

By-Laws Committee

Dr. Littlejohn, Chairman, spoke to his report as it appears on page 20 of Reports to Council. The following recommendations were subsequently passed.

Resolution #7

"THAT the following By-Law Amendment be endorsed — '10.3.1 - The Officers' Committee is charged with conducting the affairs of The Society in between meetings of the Executive Committee. It shall have all the rights and powers of The Society except those specifically or generally reserved. It shall meet as often as it is necessary at the call of the Chairman or of any four of its members, and it shall report to the Executive Committee.'" CARREID.

Resolution #8

"THAT the following By-Law Amendment be endorsed: '15 - Amendments - 15.3

Subject to the conditions provided by paragraphs 15.1 and 15.2 hereof, these By-Laws may be amended by a majority vote of a duly advertised general meeting of the members of The Society. A proposed amendment may itself be amended provided that the intent of the amendment is not altered.'" CARRIED.

Resolution #9

"THAT all existing By-Laws be repealed, and a new set of By-Laws be adopted, incorporating these changes." CARRIED.

Resolution #10

"THAT following approval of all By-Law amendments to date, by the Governor-in-Council, The Society proceed to reprinting of the By-Laws." CARRIED.

Communications Committee

Dr. Audain spoke to his report noting the efforts of the Committee to develop activities which would enhance the image of physicians. However, due to the great expense associated with such projects, and The Society's financial constraints, the Committee felt that this is not the time to proceed in this direction.

Recommendation

"THAT the Communications Committee be disbanded for now, and be restructured when the financial resources could be secured." DEFEATED.

Lively discussion ensued prior to disposition of the above recommendation with many members speaking to it. The Committee's objectives as stated in its terms of reference were reviewed for Council: "(1) to develop strategies and tactics for communicating with the membership, the public, the media and government; (2) to develop public relations plans and activities in response to membership needs." It was the consensus of the meeting that these activities are valuable and that more emphasis should be placed on communicating with the membership. Accordingly, the above recommendation was defeated.

Continuing Medical Education Needs Assessment Survey

Dr. Kaireen Chaytor of Dalhousie University provided Council with a brief overview of the results of the recent Needs Assessment Survey that had been conducted on behalf of The Society by Dalhousie Medical School. She explained for Council how this survey was carried out Dr. Chaytor was pleased to report that the response rate was extremely good, and extremely representative. She expressed great confidence that the study will help immensely in making decisions.

Following her presentation there was a draw for Continuing Medical Education Prizes. The three lucky winners of CME Packages providing for up to $1,000 in CME course registration and maintenance expenses, plus one free Dalhousie CME registration were: Dr. Patricia Wren of Halifax, Dr. Joyce Curtis of Halifax, and Dr. Stephen C.P. McCarthy of Tatamagouche. Dr. E. Jean Gibson of Elmsdale, and Dr. Peter J. Laureijs of Stellarton also won a free Dalhousie CME registration for a course of their choosing.

Editorial Board

In speaking to his report, Dr. O'Connor informed members that the Nova Scotia Medical Journal is still the biggest bargain The Society's members receive. He noted that although running at a slight deficit it still should be continued as an important part of the information system. Dr. O'Connor noted that his Board continues to liaise with The Society's staff and Officers to ensure that it remains cost effective.

Environment Committee

In speaking to his report Dr. Bethune stated that his report is but a summary of the activities of his committee during the past year. He invited members to come to visit his booth and "learn how to make your office more environmentally friendly". Dr. Bethune informed Council that he wished to put forth a motion regarding incineration. As an introduction to his motion Dr. Bethune made reference to the incinerator for solid waste disposal in the Halifax/Dartmouth area and noted that it has been a controversial issue and the committee's position, as approved by the Executive, has been one of urging caution in moving too quickly with this project. An independent health risk assessment was not done prior to its approval by the Metropolitan Authority and now is being fast-tracked for reasons which remain unclear. He cited several health aspects of concern to the committee and expanded on why The Medical Society of Nova Scotia should become involved. He noted that 40 percent of metro waste will be handled by incineration and outlined the health hazards of this. He also noted that incineration flies in the face of the 3 R's - reduce, reuse, and recycle. Incinerators have to be fed a lot and how can we recycle when we must feed the incinerator?

Resolution #11

"THAT The Medical Society of Nova Scotia considers incineration of municipal solid waste as an option of last resort due to the potential for adverse health effects and due to the implied disincentive to work towards the 3 R's - reduce, reuse, and recycle, AND THAT the above motion be communicated to the Provincial Departments of the Environment and Health and to the Metropolitan Authority of Halifax/Dartmouth." CARRIED.

Executive Committee Restructuring

On Friday after the luncheon Council participated in a panel discussion on Executive Committee Restructuring. Dr. George Carruthers chaired this event and the panelists were Drs. J. Rick LeMoine, Shelagh Leahey, and George Ferrier. Each panelist provided a different view on this issue.

Dr. LeMoine opened discussion by outlining how the present structure is set up. He expressed the view that it is time to restructure the Executive, not to enlarge or increase expenses, but to give Sections some specific input (i.e. representation) at the Executive Committee level.

Dr. Leahey supported geographical representation. She said that she was heartened to see this concept supported by the Senior Advisory Committee, and the sub-committee of the Executive Committee that had been struck to study this issue. She expressed the belief that the problem is not structure but communication within the structure. She said that physicians should be chosen on merit and ability as generic physicians, not chosen by specialty.

Dr. Ferrier in his opening remarks noted that both Drs. LeMoine and Leahey were right. He expressed the belief that the present structure works well outside the Metro area and suggested that perhaps Metro should devise its own structure - for example - one from the Section of Surgery, one from Internal Medicine, one General Practitioner, and one from one of the other sections.

Following presentation by the three panelists a discussion period followed during which many members participated. It was the general feeling of Council that whatever the structure of the Executive Committee, communication back to the members is the key issue. It was recognized that effective communication requires skill, energy, and time thus the importance of having the "right person for the job". A number of members spoke in favour of the current Branch system and expressed the feeling that there has been a breakdown in communication between The Society and the Branches. It was felt that these failings could be corrected.

Dr. Leahey concluded discussion by stating that The Society would have to develop a mechanism of review for the Executive and that it be an ongoing process.

Finance Committee

The Finance Committee report was presented on Saturday morning by Society President, Dr. W.D. Canham. Mr. Al Byrne from Doane Raymond was also present to review the audited financial statements.

The report contained four resolutions which were debated and subsequently passed.

Resolution #12

"THAT The Audited Financial Statements of The Medical Society of Nova Scotia for Fiscal Year 1991 be approved." CARRIED.

Resolution #13

"THAT Doane Raymond be retained as The Medical Society's Auditors for Fiscal Year 1992." CARRIED.

Resolution #14

"THAT membership dues for ordinary members of The Medical Society for Fiscal Year 1993 be increased by $85.00 with other categories of membership dues to be increased proportionately." CARRIED.

Resolution 15

"THAT membership dues for medical students for Fiscal Year 1993 be increased by $3.00; and that the dues for Interns and Residents for Fiscal Year 1993 be increased by $10.00." CARRIED.

A fifth resolution (below) put before Council calling for the establishment of a contingency fund generated extensive debate and was subsequently passed. Dr. Canham explained for Council the reasoning for the establishing of a contingency fund in allowing financial flexibility in unforeseen circumstances. Although it was recognized that the building provides a source of funds, it was pointed out that it is a difficult and time consuming process to remortgage the building should the need arise.

Resolution #16

"THAT The Medical Society of Nova Scotia establish a Contingency Fund with any operating surplus in fiscal year 1992, AND THAT there be a special dues levy in the amount of $50 per ordinary member for each of the next three years to build up the contingency fund." CARRIED.

G.P. Specialists Referrals - Ad Hoc

In speaking to his report, Dr. Littlejohn reiterated that in September 1990 the Section of General Practice proposed a protocol for Specialist/G.P. referrals. All of the other sections were invited to respond to the proposed protocol, and ten did so, generally with favorable and constructive comments. Dr. Littlejohn went on to report that at its meeting of April 6, 1991 the Executive Committee instructed that a committee be set up to comment on the G.P./Specialist Referral Protocol, and the Officers at their May 3, 1991 meeting asked him to set up and chair a task force to look further into the issue.

The members of the task force reviewed the original proposals and all of the responses received, and met on September 13, 1991. The discussion was both focused and constructive, and concentrated on three areas. (1) the requirements of a general practitioner making a referral; (2) the response required from a specialist; and (3) the issue of secondary referral.

Resolution #17

"THAT the minimum requirements for general practitioner referral where relevant:

1. *History of the present complaint, including previous medical history, symptoms, and clinical findings;*
2. *Reports of investigations including, where possible, original XRay films, electrocardiograms, etc.;*
3. *Treatments used and their effectiveness;*
4. *Whether or not treatment is being requested;*
5. *Whether this is a primary consultation or consultation for a second opinion;*
6. *The degree of urgency for the consultation.' ,*

AND THAT the minimum requirements for consultation reports where relevant :

1. *An overview of the presenting complaint;*
2. *Clinical assessment;*
3. *Interpretation of investigations;*
4. *Conclusions reached so far;*
5. *Recommendations for management including those for further investigations where necessary, follow-up arrangements, and treatment;*
6. *A note of what treatment has been instituted,*

AND THAT specialists should be prepared to justify secondary referral in at least one of the following criteria:

1. *Clinical necessity for accurate diagnosis;*
2. *There is demonstrable urgency relating to the patient's condition;*
3. *Geographic considerations - somewhat vague, however many areas of our province are underserviced with respect to some specialties and diagnostic facilities, should the need for some consultation or investigation seem appropriate then we recommend that the opportunity not be denied.*

be adopted as a guideline for practitioners in Nova Scotia." CARRIED.

Recommendation

THAT The Medical Society of Nova Scotia negotiate a fee code for the preparation of referral letters. DEFEATED.

Discussion of the above recommendation ensued with many members commenting. A motion of referral to the Negotiating Committee was made by Dr. Shelagh Leahey, seconded by Dr. G.P. Ernest. This motion was subsequently defeated. The consensus of the meeting was that the passing of information from one doctor to another is good practice and one which is already reimbursed.

HIV Policy for Physicians - Task Force

Dr. Ferrier presented his report as it appears on page 56 of Reports to Council. It was the consensus of Council that

although it supports The Society in taking a proactive role it was concerned about legal implications if adopted as policy. The report was received for information and referred back to the Task Force for fine tuning and then to be forwarded to the Executive Committee for approval.

Pharmacy Committee

Dr. Carruthers in speaking to his report outlined for Council the work of his committee during the past year. He reported that The Society continues to be involved in the Triplicate Prescription System noting that delays in implementation have resulted from delays in staff recruitment, programming and setting up of the pilot project. It is expected that the project will begin shortly. A monitoring committee will be established with representation from The Medical Society of Nova Scotia. He noted that Senior Citizens in the Seniors and Their Medicines Project have identified prescription labelling as an area of concern and that this has been echoed by a group of physicians interviewed in the course of this project. He informed Council that the committee is of the opinion that all Nova Scotia doctors should receive a summary profile of prescribing, such that they can better analyze their prescribing patterns and compare their prescribing practice with that of their peers.

Resolution #18

"THAT The Medical Society of Nova Scotia participate with universities, health care associations and academic medical centres in developing practice guidelines for drug therapy, especially for common, high cost and high risk medications." CARRIED.

Pregnancy Counselling

Dr. Shelagh Leahey reminded Council that at General Council 1989, The Society was requested to formulate a resource for physicians. This would be used to counsel newly pregnant women — assisting them in their many decisions regarding continuing/terminating their pregnancy and how best to safely conduct their pregnancy and birth their child. Dr. Leahey reported that resulting from the Pregnancy Counselling Survey, a DRAFT of "A Guide to Pregnancy Counselling/Women's Counselling Centres" had been prepared and would be circulated to Branches for input before it is produced in its final form. She briefly described for Council the layout of this guide noting that the book has been divided into geographic districts. Each organization is identified with a brief paragraph describing the focus of the services offered to your patient, need for referral, time required for first contact, etc.

Risk Management Committee

Dr. Anderson spoke briefly to his report which had previously been received for information. His report contained two recommendations which were subsequently passed.

Resolution #19

"THAT The Medical Society of Nova Scotia take a public position on the Prichard Report when it can react to the publicly expressed views of the Deputy Ministers of Health of Canada, the Provinces and the Territories." CARRIED

Resolution #20

"THAT The Medical Society of Nova Scotia endorse the CMA response to the Prichard Report - in particular: "The Overall CMA Response to Recommendations" on page 6 and the "CMA Response to Specific Recommendations" on pages 6 - 9 and "The Future Directions" on page 10. [Pages 6 to 10 appended to the Committee Report]." CARRIED

Senior Advisory Committee

In speaking to his report Dr. Audain stated that the Senior Advisory Committee would like to become more active in the affairs of The Society and are willing to take on other issues (i.e. similar to looking at restructuring of the Executive Committee) that the Executive Committee might wish it to investigate. He noted that the committee had been more active than in previous years having had three meetings as compared to one as had been the case in years past.

Dr. Audain reported that he was impressed with the attendance record this morning at the President's Breakfast, it being the largest he could remember. He informed Council of a couple of issues that had been discussed by the Past Presidents earlier in the day. The first being the issue of the President's Award. It was recognized that this was a good idea but the Past President's had not been aware of it and were curious as to the process used to implement such an award. The second issue discussed was the work of the Mediation Committee. It was noted that previously mediation had been a responsibility of the President and has now been delegated to a senior staff person. It was felt by the committee that the President should do the mediation between the patient and the physician. The third issue was further discussion regarding the concerns of the previous Treasurer.

Dr. Audain reported that the meeting previous to today's Breakfast Meeting had occurred on November 16, 1991 for the purpose of addressing an issue relating to the documents circulated by Dr. Debora Ryan-Sheridan who served as Treasurer over the past year. Discussions at that meeting resulted in the Chairman being asked to bring the following recommendations forth to Council. (1) "THAT a Staffing Committee of The Medical Society of Nova Scotia be comprised of the President, President-Elect, the immediate Past President and the Treasurer." (2) "THAT the Staffing Committee shall evaluate the Executive Director, and an annual written evaluation become a part of The Society's documents." (3) "THAT the evaluation results be reported to the Executive Committee at the last meeting of the Executive Committee." (4) "THAT the Senior Advisory Committee recommend that invitations to run for office as chair of the Executive Committee, Vice-Chair of the Executive Committee, Treasurer, Honorary Secretary, and President-Elect be presented with an expressed understanding that such appointments may lead to eventual election to the Presidency."

Recommendation

> *"THAT a Staffing Committee of The Medical Society of Nova Scotia be comprised of the President, President-Elect, the immediate Past President and the Treasurer." REFERRED TO BY-LAWS COMMITTEE.*

Many members participated in discussion of the above resolution with various views being expressed both for and opposed to the Treasurer being a member of the Staffing Committee. Subsequent to referral to the By-Laws Committee Dr. Littlejohn assured Council that the By-Laws Committee next year would bring forth to Council a well thought out set of recommendations.

Following debate a second resolution was subsequently moved and passed.

Resolution #21

> *"THAT the Staffing Committee shall evaluate the Executive Director and report the evaluation results to the last meeting of the Executive Committee as either acceptable or unacceptable, and an annual written evaluation become a part of The Society's documents." CARRIED.*

Recommendation

> *"THAT the Senior Advisory Committee recommend that invitations to run for office as chair of the Executive Committee, Vice-Chair of the Executive Committee, Treasurer, Honorary Secretary, and President-Elect be presented with an expressed understanding that such appointments may lead to eventual election to the Presidency." DEFEATED.*

In concluding his remarks, Dr. Audain once again reiterated that the Past Presidents have been asked to be a group simply trying to assist the Executive Committee and Officers in an attempt to better run the organization. Comments brought forth today were not in any way meant to be critical.

The following reports of other standing committees, containing no recommendations, were accepted for information and not presented at Council due to time constraints.

Gynecological Cancer (Screening for) - page 24
Home Care (Ad Hoc) - page 25
Liaison Committee - MSNS/Faculty of Medicine - page 57
Liaison Committee - MSNS/Minister of Health & Fitness - page 57
Liaison Committee - MSNS/Registered Nurses' Association - page 58
Liaison Committee - MSNS/Workers' Compensation Board - page 58
Mediation - page 58
Professionals' Support Program Committee - page 28

NOVA SCOTIA REPRESENTATIVES TO C.M.A.

C.M.A. Board of Directors

In speaking to his report Dr. Audain reported that the C.M.A. Board had met four times during the past year. Dr. Audain stated that these are marathon sessions with everyone working very hard. He congratulated Dr. Judy Kazimirski for her extremely good work in chairing the C.M.A. Board. He noted that reports on the activity of the C.M.A. Board of Directors have been presented in detail on a regular basis to The Society's Executive Committee throughout the year. Therefore, his report just highlighted some of the principal activities that took place during the year - i.e. withdrawal of legal challenge of the Canada Health Act.; Brief to the Senate Committee on Bill C-62 (GST); Brief to the Senate Committee on Bill C-43 (Abortion); New Human Reproductive Technologies; Bicycle Helmet Safety Campaign; the 1991 Leadership Conference; and Election of Senior Members.

Council on Health Care

The Chair recognized Dr. Brian N. Chutskoff of Bridgewater who had just recently been named as The Society's representative to the C.M.A. Council on Health Care and Promotion. Dr. Ferrier informed Council that Dr. Chutskoff succeeds Dr. Art H. Patterson who had served The Society well in this capacity, as well as being Chairman of the Council's sub-committee on Emergency Medical Services, for a number of years. Council extended a warm welcome to Dr. Chutskoff and a vote of thanks to Dr. Patterson for a job well done.

Council on Health Policy and Economics

Dr. Gibson briefly reviewed for Council the activities in which his Council had been involved during the past year. Dr. Gibson's report contained one recommendation. As a preface to introduction of his motion, he noted that having attended several meetings of the Council on Health Policy and Economics as well as several regional and national negotiations conferences, it becomes apparent that there are issues of common concern amongst the various Medical Societies. The issues confronting the Atlantic provinces are, to some extent, different from those confronting the other provinces at this time. Finally, there is a considerable degree of coordination between governments in their approach to health care financing and administration.

Resolution #22

"THAT The Medical Society of Nova Scotia explore avenues for cooperation and coordination of effort with other Atlantic Divisions, with particular reference to economic and negotiation matters." CARRIED.

Council on Medical Education

Dr. Gary Ernest briefly described for Council the various projects which had occupied his Council during the past year — Two Year Pre-licensure Training and the New Two-Part LMCC, CMA Quality of Care Program, Maintenance of Competence (MOCMP), Advisory Panel on the Provision of Medical Services in Under-serviced Areas, the Working Group on Care of the Elderly, Committee on Allied Medical Education, and CME as an Academic Discipline.

Discussion ensued as to what effect the two year pre-licensure training and the new two-part LMCC would have on the portability of licensure. It was recognized that a requirement for portability will be the two part LMCC plus certification of an accrediting body - e.g. - CCFP or RCFP. One member drew Council's attention to the fact that this is the first time the Federation of Medical Licensing Authorities have endorsed the concept of certification as being a requirement for portability. He reminded Council that all physicians had received this joint statement from the Medical Council of Canada. He noted that it is very important for The Medical Society of Nova Scotia to understand this and realize its impact on the medical profession's mobility.

Dr. Judy Kazimirski speaking as CMA Board Chairman informed Council that this information had been received by the Board at its last meeting and noted that present license holders would not be forgotten when this matter is being considered. The question was asked regarding "grandfathering" LMCC to which Dr. Bernie Steele, Registrar of the Provincial Medical Board reported that medical licensure is provincially governed.

The following motion was introduced and subsequently passed.

Resolution #23

"THAT The Medical Society of Nova Scotia ask The Canadian Medical Association to ensure that present license holders are not disadvantaged in any future moves to portability." CARRIED.

MD Advisory Board

In speaking to his report, Dr. Rafuse stated that it is a narrative of the mandate of the Board. He noted that MD Management is responsible for over $4 billion of physicians' money across Canada. He said that he was impressed with the management of the company, but added that physicians would like to see their investments doing better. Dr. Rafuse concluded his remarks by thanking The Society for the opportunity to serve on the MD Advisory Board. He asked that members of The Society address concerns regarding MD Management, its programs, services, etc. to him so that he can better represent his confreres on this Board.

REPORTS OF SECTIONS

The following section reports containing no recommendations were accepted for information and not presented due to time constraints.

Section of Anaesthesia, including Anaesthesia Mortality Review Committee - pg.39
Section of Emergency Medicine - page 40
Section of General Practice - page 40
Section of Internal Medicine - page 41

Section of Internes & Residents - page 56
Section of Laboratory Medicine - page 41
Section of Ophthalmology - page 41
Section of Orthopaedic Surgery - page 42
Section of Otolaryngology - page 42
Section of Paediatrics - page 43
Section of Psychiatry - page 43
Section of Radiology - page 44
Section of Surgery - page 44
Section of Urology - page 45

REPORTS OF REPRESENTATIVES TO OTHER ORGANIZATIONS

The following reports, containing no recommendations, were accepted for information and not presented at Council due to time constraints.

Abilities Foundation of Nova Scotia - page 45
Ambulance Services Advisory Committee - supplementary report
Communicable Disease Control Advisory Committee - page 45
Dalhousie. Refresher Course Planning Committee - page 45
Diabetes Care Program- page 65
Driver Licensing (Medical Advisory Committee) - page 46
Drug Information Advisory Committee - page 46
Lung Association (Nova Scotia) - page 46
Nursing Assistants (Board of Registration) - page 47
Occupational Medical Association of Canada - page 47
Pharmacy Advisory Committee - page 47
Pharmacy Review Committee - page 48
Provincial Medical Board - page 48
Rh Committee - page 48
Smoking and Health (Nova Scotia Council on) - page 55
St. John Ambulance Association - page 56
V.O.N. - page 56

ANNUAL MEETING - FIRST SESSION - FRIDAY, NOVEMBER 22, 1991

The first item of business following adjournment of Council was ratification of the deliberations of Council.

Resolution - Ratification of Actions of Council - 1st Session

"THAT the actions of the 1st Session of Council be ratified." CARRIED.

Nominating Committee Report

Following ratification of the actions of Council, Society President and Nominating Committee Chairman, Dr. Bill Canham presented the report of the Nominating Committee.

Resolution - Society Officers

"THAT the Report of the Nominating Committee with respect to the Officers be accepted and that the names contained therein are the new officials of The Medical Society of Nova Scotia. - President-Elect - Dr. J. Rick LeMoine of Sydney; Chairman of the Executive Committee - Dr. Shelagh Leahey of Yarmouth; Vice-Chairman of the Executive Committee - Dr. Anne Houstoun of Halifax; Treasurer - Dr. Ken R. Langille of Berwick; Honorary Secretary - Dr. Renn O. Holness of Halifax." CARRIED.

Resolution - Executive Committee

"THAT 1992 Executive Committee members be approved as read from the Nominating Committee Report.
Branch Representatives:
Ant/Guys. - Dr. A. William Booth
Alt. Dr. John D. Chiasson
Bed/Sackville - Dr. Chris M. Childs
Alt. Dr. C.A. Childs
Cape Breton - Dr. M.E. Lynk
Alt. Dr. D. Paul Hickey
Col. E. Hants - Dr. Steve M. Owen
Alt. Dr. Michael Cook
Cumberland - Dr. Tom J.G. Mullan
Alt. Dr. J.P. Donachie
Dartmouth - Dr. Miles W. Ellis
Alt. Dr. Lorraine N. Hardy
- Dr. Chris Gallant
Alt. Dr. J.J. Serb
Eastern Shore - Dr. Michael MacQuarrie
Alt. Dr. D.P. Sinha
Halifax - Dr. Byron L. Reid
Alt. Dr. P. Michael Reardon
- Dr. Ron D. Gregor
Alt. Dr. Dora Stinson
Inv/Victoria - Dr. J. Claude Aucoin
Alt. Dr. Caryle S. Chow
Lun/Queens - Dr. Gary P. Ernest
Alt. Dr. K.A. Barss
Pictou - Dr. H. Paul MacDonald

Alt. Dr. Erich Sperker
Shelburne - *to be advised*
Alt. to be advised
Sydney - *to be advised*
Alt. Dr. Farokh Buhariwalla
Valley - *Dr. Amer R. Ahmad*
Alt. Dr Robin G.Bustin
- *Dr. Kenneth Buchholz*
Alt. Dr. Robin G.Bustin
Western - *Dr. Peter Loveridge*
Alt. Dr. A.K. Madhvani

Interns/Residents: Ravi Kamra & Kevork Peltekian; Students: Steve Miller, Farah David and Gordon Boyd." *CARRIED.*

ANNUAL MEETING - SECOND SESSION, SATURDAY, NOVEMBER 23, 1991

Resolution - Ratification of Actions of Council - 2nd Session

"THAT the actions of the 2nd Session of Council be ratified." *CARRIED.*

Adjournment

There being no further items of business the 2nd Session of the 138th Annual Meeting of The Medical Society of Nova Scotia adjourned at 4:20 p.m. on Saturday, November 23, 1991.

The Medical Society of Nova Scotia would like to thank the following corporate sponsors for their contributions to our 1991 Annual Meeting:

Bank of Montreal
Dalhousie University Bookstore
Duke of Argyle Art Gallery
EnRoute
The Halifax Hilton
McCurdy's Printing & Typesetting
MD Management Ltd.
MT & T Cellular
Maritime Medical Care Inc.
Montreal Trust
Pork Nova Scotia

Major gifts donated by:

Air Nova
Maritime Marlin Travel

Doane Raymond

Chartered Accountants

P.O. Box 426
Suite 1100
Cogswell Tower
Halifax
Nova Scotia
B3J 2P8

Tel: (902) 421-1734
Fax: (902) 420-1068

Auditors' Report

To the Members of
The Medical Society of Nova Scotia

We have audited the balance sheet of The Medical Society of Nova Scotia as at September 30, 1991 and the statement of income and surplus, changes in financial position, and related statements of the Cogswell Library Fund for the year then ended. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Society and its related fund as at September 30, 1991, and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Halifax, Nova Scotia
October 31, 1991

Doane Raymond
Chartered Accountants

A member firm of
Grant Thornton International

The Medical Society of Nova Scotia
Balance Sheet

September 30, 1991	1991	1990
Assets		
Current		
Cash and short term investments	$ 1,109,459	$ 1,308,388
Receivables	20,123	14,162
Accrued interest	8,964	62,442
Prepaid expenses	23,210	21,364
	1,161,756	1,406,356
Land, building and equipment (Note 3)	2,318,715	1,937,796
	$ 3,480,471	$ 3,344,152
Liabilities and Equity		
Current		
Payables and accruals		
Trade	$ 38,625	$ 9,916
Construction and development	10,739	347,542
Honoraria	128,944	
CME program	193,000	
Due to Cogswell Library Fund	695	390
Deferred revenue	742,507	1,144,946
	1,114,510	1,502,794
Mortgage payable (Note 4)	595,737	300,000
	1,710,247	1,802,794
Members' Equity		
Equity in land, building and equipment	1,712,239	1,290,254
Surplus	57,985	251,104
	1,770,224	1,541,358
	$ 3,480,471	$ 3,344,152

Contingency (Note 5)

On behalf of the Board

________________________ Treasurer

________________________ Executive Secretary

Doane Raymond

The Medical Society of Nova Scotia
Statement of Income and Surplus

Year Ended September 30, 1991

1990 Actual		1991 Budget	1991 Actual
	Revenue		
	Membership dues		
$ 1,008,806	Medical Society of Nova Scotia	$ 1,091,205	$ 1,114,170
141,700	Surcharge - building	142,000	147,100
307,840	C.M.A. membership	267,000	307,830
5,235	Intern and Resident	5,000	5,250
712	Students	700	696
1,464,293		1,505,905	1,575,046
185,394	Investment income	75,000	111,849
(4,731)	Bulletin (net)	(5,000)	(5,926)
898	InforMed (net)	1,000	13,244
2,360	Other income	17,000	4,664
	Rental income	23,000	30,482
	Donations		2,584
1,648,214		1,616,905	1,731,943
1,320,436	Expenses (Page 7)	1,444,178	1,503,077
327,778	Operating fund surplus for the year	$ 172,727	228,866
(1,034,256)	Building fund transfers		(421,985)
957,582	Surplus, from previous year		251,104
$ 251,104	Surplus, end of year		$ 57,985

Doane Raymond

The Medical Society of Nova Scotia
Statement of Changes in Financial Position

Year Ended September 30, 1991	1991	1990
Cash provided from (used for)		
Operations		
Net income	$ 228,866	$ 327,778
Depreciation		18,337
	228,866	346,115
Changes in		
Receivables	47,517	(6,813)
Prepaid expenses	(1,846)	9,770
Deferred revenue	(402,439)	240,458
Payables and accruals	14,155	327,423
	(113,747)	916,953
Investing		
Proceeds on the maturity and disposal of investments		15,000
Expenditure on building and equipment	(380,919)	(1,687,394)
	(380,919)	(1,672,394)
Financing		
Increase in mortgage payable	295,737	300,000
Net cash provided (used)	(198,929)	(455,441)
Cash and short term investments		
Beginning of year	1,308,388	1,763,829
End of year	$ 1,109,459	$ 1,308,388

Doane Raymond

The Medical Society of Nova Scotia
Notes to Financial Statements
September 30, 1991

1. Basis of presentation

In 1988 a separate Building fund was activated to account for the acquisition of property in Dartmouth and the subsequent construction and equipping of the building. With construction now complete, there is no requirement for a separate Building fund to be maintained. Consequently, in the current year the Building fund accounts have been consolidated with the ordinary accounts of the Society. Certain of the comparative figures for the previous year have been restated to reflect the combination of the two funds.

2. Significant accounting policies

(a) Land, building and equipment

Land, building and equipment are stated at cost. The Society does not record depreciation on buildings and equipment.

(b) Asset additions and repayment of long term mortgage

Future capital asset additions and paydown of the mortgage liability which are funded from operating revenues will be expensed on the statement of income and surplus. A corresponding adjustment will be made to building and equipment or mortgage payable and the equity in land, building and equipment.

(c) Deferred revenue

Annual membership dues for the next fiscal year received by the Medical Society before September 30, 1991 are recorded as deferred revenue.

3. Land, building and equipment

	Cost Beginning of Year	Expenditures During the Year	Cost End of Year
Land	$ 183,308	$	$ 183,308
Building	1,723,628	135,334	1,858,962
Furniture and equipment	16,631	214,052	230,683
Computer	14,229	31,533	45,762
	$1,937,796	$ 380,919	$2,318,715

Doane Raymond

The Medical Society of Nova Scotia
Notes to Financial Statements
September 30, 1991

4. Mortgage payable

As security, the Society has provided a first mortgage on land and building at 5 Spectacle Lake Drive, Dartmouth, Nova Scotia. To be repaid in monthly instalments of $12,500 including principal and interest. Additional lump sum repayments are anticipated from collection of building surcharge.

Subsequent to September 30, 1991, the interest rate was reduced from 13 3/4 to 11 1/4%, maturing October 1, 1996. The Society also obtained an additional $55,000 mortgage draw subsequent to September 30, 1991.

5. Contingent liability

The Medical Society of Nova Scotia has guaranteed the bank loans of Nova Scotia Medical Society students with the Bank of Montreal totalling $22,400.

Doane Raymond

The Medical Society of Nova Scotia
Expenses

Year Ended September 30, 1991

1990 Actual		1991 Budget	1991 Actual
	Administration		
$ 9,633	Audit fees	$ 10,500	$ 9,893
5,416	Investment trustee fees	4,000	3,677
	Insurance, travel, bonding		
747	and property	600	365
2,625	Legal fees	7,500	7,405
69,416	Office rent	5,743	6,902
35,620	Office services	41,000	46,402
7,358	Postage	15,000	10,386
2,443	Repairs and maintenance	2,700	2,844
5,539	Taxes		
19,675	Telephone	17,000	17,772
23,815	Travel - secretariat	20,000	30,027
812	Unforeseen expenses	5,000	9,034
	Building expenses		
	Taxes	67,500	40,672
	Utilities	34,240	31,839
	Interest	70,470	72,188
	Insurance	1,500	1,760
	Building services	12,000	10,703
	Grounds	3,500	4,500
	Maintenance agreements	3,000	4,022
	Moving expenses	2,500	1,352
	Salaries and benefits		
405,400	Salaries and related expenses	411,450	433,390
5,211	Canada Pension Plan	6,900	6,077
50,953	C.M.A. pension plan and insurance	48,875	58,186
7,073	Unemployment Insurance	9,200	8,431
	Departments		
9,879	Communication department	11,500	10,799
5,343	Economics department	9,000	5,043
25,457	Professional Support Program	40,000	31,622
	Committee expenses including travel		
17,383	Executive meetings	19,000	11,663
3,778	Officers and branch meetings	7,500	8,120
25,573	President's travel	20,000	17,158
8,159	President elect travel	8,000	19,633
10,494	Other committees	16,000	5,530
7,000	Archives committee	7,000	7,500
	Negotiations		3,379
	Peer review committee		3,470
	Skills enhancement		20,964
	Miscellaneous		
24,943	Annual meeting	20,000	19,974
8,843	C.M.A. general council - travel	12,000	11,568
34,000	C.M.E. grant	40,000	
307,870	C.M.A. membership	267,000	307,615
18,337	Depreciation		
3,610	Drugs and therapeutics bulletin	4,000	3,610
151,189	Honoraria	150,000	188,938
1,881	Staff development	5,000	1,235
4,961	Student assistance loan plan	7,000	3,173
	Eastern divisions annual conference	1,000	3,254
	Think tank meetings		1,002
$ 1,320,436		$ 1,444,178	$ 1,503,077

Doane Raymond

The Medical Society of Nova Scotia
Cogswell Library Fund
Balance Sheet

September 30, 1991	1991	1990
Assets		
Receivable from Operating Fund	$ 695	$ 390
Investments, at cost	5,200	5,200
	$ 5,895	$ 5,590
Fund Balance		
Cogswell Library Fund balance	$ 5,895	$ 5,590

The Medical Society of Nova Scotia
Cogswell Library Fund
Statement of Revenue, Expenditures and Fund Balance

September 30, 1991

	1991	1990
Revenue		
Income from investments	$ 494	$ 409
Expenditures		
Trustee expense (recovery)		(250)
Contributions to Dalhousie University	189	466
	189	216
Excess of revenue over expenditures (expenditures over revenue)	305	193
Fund Balance, beginning of year	5,590	5,397
Fund balance, end of year	$ 5,895	$ 5,590

Doane Raymond

Presidential Valedictory Address - 1991

W.D. Canham, M.D.

Dartmouth, NS

The state of Medicare has been my principal concern as your president this year. Medicare is 20 years old and is showing signs of trouble. It made it through childhood and adolescence as a "free for all system", but it is now an adult and has increasing responsibilities to an ever aging population. I asked questions about the Medicare system often as president, and now ask, does it serve us well? The self-employed would say no. They, like all Canadians, must wait months for investigation and surgery. Their condition, like any of our afflictions, ultimately may be safely cared for, but without addressing their need for timely care. They often lose their businesses due to the wait. They may have worked years to become successful, but it is all wasted on waiting lists for specialists appointments, hospital investigations, and elective surgery. These are our most able citizens and we should have greater concern. Their losses in a competitive world is every Canadian's loss.

Medicare is a mature program and must not have financial barriers to the truly sick, but must provide needed care in a timely fashion. This we all know is a failing of Canadian Medicare. The system is safe, but not sensitive to the needs of all its patients. We must pay better attention to the issue of timely delivery of care, but the new financial restrictions make it difficult. We must ask, would industry help? I congratulate the Worker's Compensation Board, who recognized the cost of waiting lists and opened their own hospital beds at the Victoria General Hospital. I ask, can other companies do the same? Would that be fair? The private insurance companies also must pay benefits for patients on waiting lists for medical care that are no less expensive. We should be concerned about the waiting lists and as we do not have new money, we have to affect savings. The lack of even a simple financial barrier is expensive to the system, and ultimately we all pay. A second opinion, I would suggest, or even a third opinion is reasonable. However, should a fourth or fifth opinion be free?

Doctors are asked daily for this degree of service. It is costly and wastes time that could be better used working on their own waiting lists. These many medical opinions (we often find out after the fact), are really to try and get a government or insurance pension. Yes, as you might expect, physicians are often verbally abused when they say "You are OK, sir or madam, and you should go back to work". We all pay for that unnecessary opinion, by having to wait when we are sick, or from our wallet through taxes.

We do not know the cost of a fair, modern health care system. We know it is high and is ultimately a political decision what level government will provide. We know the United States spends 25 to 30 percent more than Canada, but doesn't insure 10 percent of its population. Japan spends less but has the highest rising health care costs in the world - if current trends continue, they will spend more than any of us. Dare we ask for help from private sources for financing? I am sympathetic with the political costs of saying the "free for all" system has ended, but the reality of Bill C-69 (Federal Health Care Cost-cutting Legislation) is real. The Federal Government says that it is impecunious - or broke. The "Free for all" really is over. Some fair free market discipline is reasonable: I would suggest just reasonable care should be free for all but not to the point where the absence of a financial barrier creates abuse. Our health care system must be universally responsible to all but not always absolutely free. I would suggest that there is no one in this audience who hasn't cringed as they grudgingly wrote hundreds of dollars of prescriptions for snowbirds preparing for their yearly migrations. We all wonder what working man or woman will struggle in the cold to pay a Florida Pharmacy and their own oil bill and day care that month for their own children - "Free for all" - is it fair for all? Many questions, but who has the answers?

A free for all Government funded system provides cause for concern. It is, after all, a Health Care Monopoly and, like the company store, you must use it or face some consequences. Those who run the system, the Government, (and Yes the Doctors), are only too quick to tell you that you are getting a deal. You must take them at their word. Would it not be better to have a neutral third party do the quality control? What about a committee from the Harvard School of Public Health and the London School of Economics. The reality is they would not be more costly than Dr. Earl Reid and a Royal Commission. Then we wouldn't be given an arbitrary envelope of Funds (typically for the past 20 years 25 percent of the Nova Scotia Budget), which the Government and Profession spend, and be told as citizens that we got the best deal in the world. You would know what you should be paying, for a reasonable level of service.

I would suggest that first we establish the cost of a good health care system, and then spend what money we have. We may be paying too much, perhaps too little. Once we know the cost, we can decide whether we should buy a top-of-the-line model or an economy model. We first ask Society what it wants. Yes, we also should allow the individual to spend more, should he or she choose to buy health care products or services rather than yet more Japanese electronics. This spending on Health Care probably would help our balance of payments, as it is a local product and service. Universality

after all works not because this or that party is in power and it is their political plank. It only works when the health care product is consistently of very high quality and the tax field that supports the program is adequate to the task of funding. Bill C-69 will change that financial foundation.

The cost is the question. What should we pay as individuals and as a society?

We all are told daily that Canadians pay high taxes compared to Americans. The fact is that Canadians pay lower taxes, (Federal, Provincial, Sales and Municipal combined) than countries of the European Community, including Britain, and only slightly more than the Japanese. You get what you pay for. Canadians would like a US tax system but not US Social, Educational, and Health Care Services from their Government. I suppose, depending on your political stripes, you could argue that we can continue to have a "free for all" system. You can only have it, sadly, with European style taxes. You "can't have your cake and eat it too", as my parents so often told me.

"Clean up your own act", and yet again cut costs in health care, the critics of physicians will say in response to my comments.

I think that is a fair comment, but getting a bit worn. We have had a decade of cost cutting and there is little meat left on the bone. The Government, Civil Service and Medical Society have worked hard to make this province's system efficient. They all deserve credit. Current negotiations will go a long way to complete this process.

There will come a time when this process is complete. Then, new funds from a European style tax system, User Fees or Private insurance will be needed. You can choose your approach, and this is part of the political process. There is a caveat - "You cannot have your cake and eat it too".

I would argue against an American Style system if my political opinion counts. I would say do not allow the Canadian System to be eroded by yet another ten years of cost cutting. The Canadian Health Care system can reach the status of a third World or Eastern European system. That is where endless cost-cutting leads. We can do better, but must face the financial reality that zero percent budgets take us in that direction.

Canadian Medicare, regardless of the shortcomings, is still and has been an example to the world of the right way to do things. We must criticize it but also be proud. We as Canadian physicians would suggest that if other segments of Canadian and North American Society had been as efficient financially and with quality control of their product as doctors have been with Medicare, we would be in a better position as a nation to afford medical services. The takeovers which amassed fortunes for so many managers and Board members in the 1980's amassed debt for their corporations, and these corporations now cannot compete in the competitive world under this burden of debt. This makes for little corporate profit to be taxed to pay for Medicare. We all should hold corporate management, and not as in the past, labour, accountable. The truth travels slowly, but it even reaches doctors in time and Corporate America has been less than responsible and now must be accountable. We as doctors, nonetheless, for whatever reason, find ourselves in the debt-ridden and depressed 1990's. We as physicians still have a profound responsibility to provide the best health care possible for the dollar. We must resurrect from a century ago the ideas of frugal scottish responsibility and forget the frivolity of the 1980's. The 1990's will be tough times. We hope not similar to the dirty 30's, but certainly a recession similar to 1981 or 1982.

We will accept our responsibility to provide care for Nova Scotians. We do need help with our continued need for ongoing medical education and with the careful but necessary introduction of developed technology. This will cost, but we promise to shop the world carefully and get the best deal possible for Nova Scotians.

It now is apparent to many in Canada that the Health Care System needs medical societies to help in some way with its general management. This has been true in Nova Scotia for years, but now Ontario has discovered this approach. Co-operation between the Government and the Society has been cost effective in Nova Scotia. There haven't been strikes and dissent that costs money. Fair negotiation of all aspects of Medicare has worked in Nova Scotia. The system in the 1990's will require a more sophisticated Medical Society to manage a complete health care system. The new question is, can our committee structure in the Medical Society handle this new job? Dr. Rob Stokes has spent considerable time with re-organization this year and hopefully we well be able to meet this new demand and serve the Province better.

In closing, I would like to comment on the role of the President of the Society. I strongly believe that he or she always should be in active medical or surgical practice. This controls his or her perspective on issues in the best interests of the membership. The problem is that the job is rapidly becoming not a part-time endeavour. I would suggest that the best way to reconcile these desperate interests is to employ increasingly the President-Elect and Past President.

I would like to thank Dr. Robert Stokes and Dr. Peter Jackson, who allowed me to be an active practitioner and your president this year. I look forward to supporting your new President and thank you for the opportunity to have served this Society in the past year.

I am optimistic about the ability of Nova Scotians, their Government of the day and the Doctors of this Society to make medicare work. We must be critical but never must the horror of illness bring also financial despair to a family under stress. We must not fail in protecting Nova Scotians from the financial consequences of catastrophic illness. We must not let the system fail, or we will betray our promise to western medicine as the only country that can provide reasonable and needed care uniformly to all its citizens. We would also betray the faith we owe to our own parents and grandparents, who originally developed this Medicare system. We must make this system work and work well. We have a reputation to defend. □

Some Pictorial Highlights
137th Annual Meeting

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 1 Drs. Howard Locke, Alan MacLeod and Lea Steeves, the 1991 recipients of Senior Membership, Dr. R. Gordon Simpson who also received this honour was unable to attend the President's Dinner.

Photo 2 Dr. Carol Guzman, President of the CMA congratulates Dr. Rob Stokes, moments after he is elected the new President of the Society. Executive Director Richard Dyke shares the important occasion.

Photo 3 Barb Stokes presents Dr. Sue Canham with the ideal gift – a car seat for her new baby.

Photo 4 Dr. Rick LeMoine, President Elect receives a "training" chain from Past President Dr. Bill Canham who offers some light hearted advice on the type of demands the future President should expect.

Photo 5 Dr. Rob Stokes "first" encounter with representatives of the Press.

THE MEDICAL SOCIETY OF NOVA SCOTIA

NOVA SCOTIA DIVISION OF THE CANADIAN MEDICAL ASSOCIATION

MEMBERS OF EXECUTIVE COMMITTEE

OFFICERS

President	R. Stokes
President-Elect	J.R. LeMoine
Past President (Immediate)	W.D. Canham
Chairman of the Executive Committee	S.M.T. Leahey
Vice-Chairman	Anne Houstoun
Treasurer	K.R. Langille
Honorary Secretary	R.O. Holness
Member-At-Large	K.R. Crawford
Executive Director	R.J. Dyke

OBSERVERS AND STAFF

Economics Committee Chairman	L.P.M. Heffernan
Director, Health Policy & Economics	Paul Childs
Associate Director, Health Policy &Economics	M.K. Needler
Director of Communications & Public Affairs	Dorothy Grant
Manager, Corporate Affairs	Shirley Miller

BRANCH SOCIETY REPRESENTATIVES

Antigonish-Guysborough	A.W. Booth
Bedford-Sackville	C.M. Childs
Cape Breton	M.E. Lynk
Colchester-East Hants	S.M. Owen
Cumberland	T.J.G. Mullan
Dartmouth	M. Ellis, C. Gallant
Eastern Shore	M. MacQuarrie
Halifax	R.D. Gregor, B.L. Reid
Inverness-Victoria	J.C. Aucoin
Lunenburg-Queens	K.A. Barss
Pictou	H.P. MacDonald
Shelburne	G. Hollway
Sydney	J.E. Sampson
Valley	A.R. Ahmad, K. Buchholz
Western	P.L. Loveridge
Student Members	Steve Miller, Farah David, Gordon Boyd
PARI-MP Representatives	Ravi Kamra, Kevork Peltekian

OBSERVERS

Editor-in-Chief – The Nova Scotia Medical Journal	J.F. O'Connor
Medical Director M.M.C. Inc.	A.C. Watson
President & C.E.O. M.M.C. Inc.	D.L. McAvoy
C.M.A. Board of Directors	V.P. Audain
C.M.A. Council on Health Care	B.N. Chutskoff
C.M.A. Council on Health Policy and Economics	R.J. Gibson
C.M.A. Council on Medical Education	G.P. Ernest
M.D. Management Limited	E.V. Rafuse

STANDING COMMITTEES

	Chairman
Allied Health Disciplines	A.H. Shears
Archives	
By-Laws	P.W. Littlejohn
Child Health	N.P. Kenny
Communications	V.P. Audain
Community Health	M.J. Cussen
Environment	G.H. Bethune
Ethics	D.F. Fay
Gynecological Cancer (Screening Program)	J.F. Jeffrey
Home Care	M. Kazimirski
Hospital & Emergency Services	D.M. Maxwell
Liaison Committees:	President
(i) Minister of Health	
(ii) Workers' Compensation Board	
(iii) Registered Nurses' Association	
(iv) Faculty of Medicine	
Maternal & Perinatal Health	A.C. Allen
Mediation	President
Medical Education	
Membership Services	
Morality Review (Appointed by and Reports Through Section of Anaesthesia)	A.C. Walker
Occupational Health	R.E. Marchant
Pharmacy	S.G. Carruthers
Professionals' Support Program	W.G. Gill
Risk Management	J.P. Anderson
Senior Advisory Committee	V.P. Audain
Site Development	I.A. Cameron

The Nova Scotia Medical Journal
5 Spectacle Lake Drive
City of Lakes Business Park
Dartmouth, N.S B3B 1X7
(902) 468-1866 FAX 468-6578

BRANCH SOCIETIES

	President	Secretary
Antigonish-Guysborough	J. Hamilton	S. Rappard
Bedford-Sackville	A. Carey	J. Fraser
Cape Breton	B.J.M. O'Brien	P.W. Littlejohn
Colchester-East Hants	S.M. Owen	B.R. Wheeler
Cumberland	F. Bravo-Florez	S.I. Awan
Dartmouth	M. Ellis	L. Hardy
Eastern Shore	D.P. Sinha	R.J. Fraser
Halifax	R.D. Gregor	P.M. Reardon
Inverness-Victoria	N.G. Pillai	R.J. Genge
Lunenburg-Queens	T.J. Woodford	K.A. Barss
Pictou	C.R. Elliott	R.A. Nicholson
Shelburne	I.C. Cree	Mark Riley
Sydney	J.E. Sampson	Gail Bisson
Valley	R.G. Bustin	R.C. Jung
Western	T. Murphy	R.P. Belliveau

SECTIONS

Anaesthesia	A. Finlayson	L.B. Marr
Emergency Medicine	D.E. Sinclair	L.M. Costello
General Practice	P.W. Littlejohn	S.A. Canham
Internal Medicine	A.D. Cohen	K.R. Crawford
Internes & Residents	K. Pelekian	C. Zip
Obstetrics and Gynaecology	R.H. Lea	
Ophthalmology	F.J. Carpenter	D.M. OB'rien
Orthopaedic Surgery	E. Howatt	Wm. Stanish
Otolaryngology	C.C. Cron	
Paediatrics	M.B. O'Neill	A.E. Hawkins
Laboratory Medicine	D.M. Haldane	A. Foyle
Psychiatry	A.E. Hipwell	S. Brooks
Radiology	G.J. Butler	C.D. Lo
Surgery	P. Roy	J.P. Curry
Urology	R.W. Norman	B.W. Palmer
Vascular Surgery	D.A. Pyne	R.S. Dunn

Epstein-Barr Virus Infection and Infectious Mononucleosis

John C. LeBlanc,[1,2] MD, MSc, FRCPC; Desmond Leddin,[3,6] MD, FRCPC; Spencer H.S. Lee,[4,6] PhD;
Wenda L. Greer,[5,6] PhD, FCCMG; and G. Ross Langley,[3,6] MD, FRCPC

Halifax, N.S.

Interest in the Epstein-Barr Virus (EBV), the etiologic agent of infectious mononucleosis (IM), has increased in recent years for several reasons. These include the recognition that there are other IM-like syndromes; the increasingly recognized IM hepatitis; the availability of a variety of serological tests for the diagnosis of current or past infection; and knowledge that the EB Virus initiates or contributes to certain lymphoid malignancies, particularly the lymphomas that occur after transplantation. This brief review of EB Virus and IM is based on a Victoria General Hospital Department of Medicine Grand Rounds presentation and discussion of the diagnostic problem presented by a young woman. This patient had a sore throat, persisting high fever, marked cervical adenopathy and hepatitis, yet did not have significant atypical lymphocytes in the peripheral blood and the heterophil antibody test was negative, as were a host of serological studies for other microbiological agents. On the other hand EBV specific antibody testing suggested she had reactivated IM.

EPIDEMIOLOGY

EBV is felt to be a widespread agent and is spread largely by exchange of saliva. Young children are highly susceptible to EBV infection and small amounts of virus are capable of inducing lifelong immunity. However young adults can only be infected by intensive exposure through exchange of large amounts of buccal fluids between a healthy seropositive individual with a susceptible partner.[1] EBV has also been spread via blood transfusions. The disease is hyperendemic in Nova Scotia as elsewhere. From the public health point of view, there are no true epidemics and therefore no measures which can be instituted to protect susceptible populations. Primary EB virus infections are rare during pregnancy because of the small number of susceptible women. However since the virus may be transmitted to the fetus in utero, women with IM should be observed carefully during pregnancy.[2]

EBV that has entered the mouth of an antibody negative individual gains access to the body by infecting epithelial cells in the oropharynx. Infection of these epithelial cells provides a source of virus replication which reaches a peak at the time of cell desquamation. This leads to dissemination of EBV to the second target cell population, B lymphocytes and, via a receptor related or identical to the receptor for the third component of complement, C3d, the virus enters the cell. B lymphocytes are the predominant lymphoid cell of the tonsils, and from there the B cells or viremia leads to other lymphoid tissue of the body being infected.

The main populations of concern in North America are adolescents and young adults, especially in closed quarters such as university residences. Approximately 50 to 65% of first year university students entering North American and British institutions have serological evidence of previous EBV infection. The majority of these cases were asymptomatic for the EBV infection. Between 12 to 25% of seronegative first year university students seroconverted in their first year at university.[3]

The Epstein-Barr virus was discovered through research on a lymphoma found in central Africa and only later was its role as the causative agent of IM determined. In 1958 Burkitt reported the concordance of the distribution of that lymphoma in Africa and hyperendemic malaria. This epidemiologic observation precipitated the search for a virus and, six years later Epstein, Barr and Achong successfully identified herpes virus particles in cultured biopsy material from that lymphoma. Discovery of the EB virus's association with IM was accidental, when serum from a laboratory technician convalescing from IM was demonstrated to have antibodies to this virus. Through subsequent large scale epidemiologic studies, it was confirmed that EBV caused infectious mononucleosis. Recently, an epidemiological and molecular association of the EB virus has been recognized with nasopharyngeal carcinoma and with the lymphomas that occur after kidney, heart and lung transplantation.[4]

HEPATITIS IN INFECTIOUS MONONUCLEOSIS

The co-existance of sore throat, fever and jaundice in a person 15-35 years old is almost always due to IM, although only 11% of patients with IM have jaundice.[5] Hepatitis due to infectious mononucleosis is similar to that due to hepatitis A. In hepatitis A however, fever generally disappears when the jaundice occurs whereas fever often continues during the icteric period in infectious mononucleosis. The hepatitis due to infectious mononucleosis is generally transient, subclinical, and without long term sequelae. Rarely, the hepatitis may be fatal. This very uncommon event largely occurs in patients who have a severe immunological defect as most often is seen in a condition called "X-linked lymphoproliferative syndrome".

Physical examination will reveal enlargement of both the liver and spleen in about 15% of patients, and

Departments of Community Health and Epidemiology[1], Pediatrics[2], Medicine[3], Microbiology[4] and Pathology[5], Dalhousie University and the Victoria General Hospital[6], Halifax.

Correspondence: Dr G.R. Langley, Victoria General Hospital, Halifax, B3H 2Y9. Telephone 428-2107, Fax 428-4436

splenomegaly alone in as many as 75%. Abnormal liver function tests occur in 50-90% of patients who have IM. Liver biopsy may be abnormal within five days of onset of the illness but maximum changes are seen between 10 and 30 days. The portal zones are initially infiltrated with lymphocytes and polymorphs, and later by lymphoid cells and plasma cells which spill over into the sinusoids. Kuppfer cell hyperplasia may be prominent but liver cell necrosis is uncommon in the majority of cases.

Epstein-Barr virus infection may cause granulomatous hepatitis in adults or a chronic active hepatitis-like picture in children with immunodeficiency. It is not clear whether these manifestations are due to the EB virus alone. However it seems likely that immune deficient individuals are at risk for more severe and prolonged hepatitic disease from this virus.

SERODIAGNOSIS OF INFECTIOUS MONONUCLEOSIS

Two types of serological tests are currently available for the diagnosis of IM; heterophil antibody* and specific antibodies to EBV (Table I). Prospective studies have now established the expressions of EBV infection which are somewhat age-dependent: a) in early childhood a mild even asymptomatic infection occurs which invariably leads to development of specific immunologic responses and the establishment of a lifelong carrier state; b) if primary infection does not occur in childhood but occurs in adolesence, about half the patients will develop the clinical syndrome of IM; and c) classical heterophil-positive IM is characteristic of the young adult between the ages of 15 and 25 years of age.[1]

The Paul-Bunnell-Davidsohn heterophil antibody test for an IgM antibody, which develops in most patients with IM, is still considered the standard serological test for diagnosis.[6] Simplified screening tests for the heterophil antibody, based on the principles of Paul-Bunnell-Davidsohn tests, have also been developed and have become widely available. These include for instance: Hetrol slide test (Difco); Mono check (Hyland); Monospot test (Ortho); Monosticon test (Organon-Technika). The most reliable of the slide tests have an accuracy of nearly 99%.[1]

Table I outlines the principles for the heterophil based diagnostic tests and the specific antibodies patterns as related to various clinical states of EBV infection.

Usually, heterophil antibodies can be demonstrated by the end of the 1st week of illness but occasionally may be delayed until the 3rd or 4th week. Patients suspected of having IM but with negative heterophil antibody tests might therefore have repeat studies or measurement of specific antibodies. Heterophil antibodies are transient, ordinarily lasting only several weeks.

The few uncertainties of the heterophil antibody test can be investigated by evaluating specific EBV antibodies (Table I). The antigens found to be most useful for the serodiagnosis of IM and for the presence of the EBV are: the viral capsid antigen (VCA); EBV-induced early antigens (EA); and Epstein-Barr nuclear antigens (EBNA).[7]

Recent EBV infection is indicated by the presence of one or more of: IgM antibody to VCA; the presence of IgG antibody to VCA together with the absence of antibody to EBNA; a rising titre of antibody to EBNA; or the presence of elevated antibody to VCA and EA of the diffuse (D) type. Presence of both VCA and EBNA antibody suggests convalescence or a past infection. Antibodies to EBNA are not found in the acute phase of primary EBV infection, and usually appear 30 to 50 days after the onset of the illness.[8] They emerge during the convalescent phase and persist in most individuals for life. Henle and Henle, the pioneers in EBV serology, have noted that not every patient conforms to the characteristic patterns of EBV antibody profile as described. Some antibodies may be missing, and nonspecific antibodies may mimic, replace, or obscure specific reactions. Thus, difficulties can arise in the interpretation of these serodiagnostic tests. Molecular biological techniques offer further opportunities to detect EBV in the host and to determine if the virus is in an activated or latent state.

MOLECULAR BIOLOGY OF EBV INFECTION

The Epstein-Barr Virus genome has been very well characterized and the entire nucleotide sequence has been determined. EBV can exist within the lymphocyte in either a linear, or a circular (episomal) form.[9] The linear form is associated with release of infectious virus particles and death of the host cell. The episomal form is associated with the post-infectious or latent state.

Following EBV entry into the cell, several viral antigens, a viral protein resembling interleukin-10 and a cell membrane marker are expressed. The interleukin analogue inhibits the production of host interferons and provides a selective growth advantage to the virus. The expression of the membrane antigen (CD 23) acts as an autocrine growth factor for the B lymphocytes.

In response to the virus entering the B lymphocytes and being incorporated into the cell's genome, the host responds by increasing the production of T lymphocytes. These T cells are cytotoxic to the EBV infected B cells. These circulating cytotoxic T lymphocytes are recognized as, and make up most of, the "atypical" lymphocytes in the peripheral blood. In the normal individual, the viral infection is self limiting, as proliferating B lymphocytes are contained by the vigorous cytotoxic immunity of the host, and a latent carrier state results. However, when there is a failure or suppression of the immune system, a high incidence of lymphoproliferative disease results. This has been observed in Wiskott-Aldrich syndrome, Severe Combined Immunodeficiency Syn-

*The cardinal feature of heterophil antibodies is that they are produced by an animal in response to contact with an antigen from one source, and are found to react with an antigen from another source. It is the antibody which is heterophil, not the antigenic determinant itself. (Franks D, Coombs RRA. General Aspects of Heterophil Antibody systems. In: Carter RL, Penman HG, eds. *Infectious Mononucleosis.* Edinburgh: Blackwell Scientific Publication, 1969; pg 162-177).

TABLE I

SEROLOGICAL INVESTIGATIONS IN EBV INFECTION

A) HETEROPHIL ANTIBODY

	Test	Normal Range	Interpretation	Basis of Test
a)	Paul-Bunnell-Davidsohn Differential absorption	less than 1:56	Positive if elevated titre persists after Guinea Pig Kidney Absorption	Test measures titres of agglutinins for sheep erythrocytes before and after absorption with (a) guinea pig kidney and (b) beef cells. No appreciable reduction of titre with guinea pig kidney absorption but a major reduction of titre with beef erythrocyte absorption.
b)	Various commercial kits		Patient's serum shows greater agglutination of horse or horse plus sheep erythrocytes	Agglutination of horse or horse plus sheep erythrocytes by patient's serum with differential absorption similar to Paul-Bunnell-Davidsohn Control included. Some companies "process" horse RBC so differential absorption not required.

B) SPECIFIC EPSTEIN-BARR ANTIBODIES* AND CLINICAL STATUS

	VCA		EA-D	EA-R	EBNA
Clinical Status	IgM	IgG	IgG	IgG	IgG
Susceptible	-	-	-	-	-
Infectious Mononucleosis	+	++	+	+/-	-
Recent EBV Infection	+	+	+/-	+/-	-
Past EBV Infection	-	+	+/-	-	+
Reactivation of EBV	+/-	++	++	+/-	+/-

* VCA = viral capsid antibody; EA-D = antibody to early antigen-diffuse component; EA-R = antibody to early antigen-restricted component; EBNA = Epstein-Barr nuclear antibody

drome, Burkitt lymphoma and after transplantation when immunosuppressive drugs are required.

Techniques of molecular biology have been used to examine biopsies from sites of lymphoproliferative disease, particularly in immunocompromised patients. Portions of the linear EBV genome of the activated EB virus can be excised from the viral genome and identified on Southern Blots. Alternatively, if viral genomic sequences are present they can be amplified and detected using the polymerase chain reaction.[10] Examination of lymphocytic lesions in post-transplant patients have revealed monoclonal expansion in most biopsies. Sometimes more than one clone was found suggesting that when tumors arise they begin as a polyclonal growth of lymphocytes which progress to oligoclonal and later monoclonal tumors.

If a post-transplant lymphoma develops there is commonly serological and molecular evidence of a new or "reactivation" type of EBV infection (Table I).[11] Therapy for post-transplant lymphomas is complex. Those which are clinically aggressive may respond to reduction or cessation of immunosuppression.[4,12]

Chromosomal and molecular biology studies of Burkitt lymphoma reveal a chromosome translocation in the tumor lymphocytes. One of the chromosome breakpoints is near an oncogene important for cell growth and the other is near an immunoglobulin gene. Since Burkett lymphoma is endemic to areas of Africa where malaria is common, it is hypotheized that malaria impairs T-cell immune surveillance in patients infected with EBV, and allows for increased B lymphocyte growth. The growth of B cells could increase the likelihood of mistakes during immunoglobulin gene duplication, and those which result in a particular chromosome translocation develop Burkitt lymphoma.

SUMMARY

The discovery of the EB virus in cultures of lymphoid tissue from Burkett lymphoma patients and the accidental discovery that the serum of a laboratory technician convalescing from infectious mononucleosis had antibodies to that virus, initiated a series of research efforts in the ensuing two decades. These have focused on the epidemiology of EBV, the spectrum of EBV infections including reactivation of latent disease, the association of the virus with several malignancies, and the molecular biology of the virus during its life-long residence in the infected host cell. The more recent recognition that most post-transplant lymphoproliferative disorders, including the approximately 5% of post-transplant patients who develop frank lymphomas, are associated with new or reactivation of EBV infection, has led to a renewed interest in this virus. Future research into the EBV virus-cancer association is expected to provide a greater understanding of the malignant process. □

References

1. Jandl JH. *Blood Textbook of Hematology*. Toronto: Little, Brown, 1987.

2. Stagno S, Whitley RJ. Herpesvirus infections of pregnancy. I. Cytomegalovirus and Epstein-Barr virus infections. *New Engl J Med* 1985; **313:** 1280-1274.

3. Dan R, Chang RS. A prospective study of primary Epstein-Barr virus infections among university students in Hong Kong. *Am J Tropical Med* and *Hyg* 1990: **42:** 380-385.

4. Cohen JI. Epstein-Barr virus lymphoproliferative disease associated with acquired immunodeficiency. *Medicine* 1991; **70:** 147-160.

5. Hoagland RJ. General features of infectious mononucleosis. In: Glade PR, Editor. *Infectious Mononucleosis*. Toronto: J.B. Lippincott, 1973: pg 1-6.

Continued on page 179.

Estrogen and Progesterone Receptor Determination in Breast Cancer:

OVERVIEW OF THE LITERATURE AND EXPERIENCE IN NOVA SCOTIA *

Pedro G. Lopez,[1] MD, Morris Givne,[2] PhD, Charlene McKenzie,[3] BSc

Halifax, N.S.

We review the basic science and clinical relevance of estrogen and progesterone receptor status in breast cancer. Results of samples referred in from community hospitals and compared with those of the reference centre and issues pertaining to quality assurance are discussed.

The determination of estrogen receptor (ER) and progesterone (PR) receptor status in extirpated breast cancer tissue is a valuable parameter used in the management of these patients. Of post-menopausal women, 75 to 80 percent show estrogen receptor positivity in their tumors, while 50-65 percent are progesterone receptor positive. These figures are somewhat lower in the pre-menopausal population.[1-3]

Receptor positivity has been interpreted as a reflection of the biology of these cancers. Indeed, several studies have shown increased disease-free survival following primary definitive therapy on increased survival following the development of metastases in estrogen receptor positive patients.[4,5] Part of this observed difference may be due to superior response rates to hormonal therapy in receptor positive individuals. The possibility of inherent differences in biology are supported by recent data showing an 8-9 percent difference in overall survival between ER positive and negative stage I (negative for axillary lymph nodal metastases) patients treated with local therapeutic modalities.[6] However, this is still a controversial issue.

Response rates to hormonal manipulation in the metastatic setting are approximately 70-80 percent in strongly positive ER or PR patients. However, equally high response rates are seen if both of these variables are positive.[1,7,8] Given that the likelihood of a tumor being progesterone receptor positive correlates positively with the strength of the estrogen receptor value, it has been suggested that careful quantitation of the estrogen receptor is the most useful piece of data to be determined.[9] The lack of perfect correlation between estrogen and progesterone receptor positivity may be due to abnormalities in the estrogen receptor *per se* as expression of the progesterone receptor does depend in some measure on a qualitatively intact ER. More accurate assays determining specifically whether receptor-ligand binding is intact, may prove to be superior to the traditional cytosolic receptor determinations now in use.[10] When estrogen and progesterone receptors were analyzed in multivariate models, the presence of progesterone receptors were more significant than that of estrogen receptors for predicting time of recurrence, regardless of what other variables were included in the model.[11,12]

Receptor positivity reflects on the importance of the hormonal milieu in modulating tumor cell growth. Estrogen can induce activity of specific enzymes needed in cellular DNA replication.[13]

It can also be involved in acting as a stimulus for synthesis of other products including the progesterone receptor and other cellular growth factors that may promote tumor growth. Examples of these include: insulin like growth factor-II; platelet derived growth factor; and transforming growth factor alpha. Negative modulation of an inhibitory growth factor, namely, transforming growth factor beta (TGF-Beta) has been demonstrated.[14] It has been proposed that these multiple potential regulators may be linked to paracrine or autocrine mechanisms of tumor growth. This would explain why some patients, who are estrogen receptor negative, still respond to an anti-estrogen, such as tamoxifen, as this agent may promote the release of TGF Beta in small populations of estrogen receptor positive cells in an otherwise receptor negative lesion. Furthermore, it has now been proposed that steroid receptors may act as transactivators of gene expression, possibly by leading to stabilisation of other protein transcription factors.[15]

Estrogen and progesterone receptor determination may be accomplished by a radioligand binding assay, an enzyme immunoassay and by immunohistochemical assays on formalin fixed, or frozen tissue blocks. The newer enzyme quantitative immunoassay (EIA, Abbott Laboratories) is more sensitive, specific and requires less tissue (0.5 g) than the older radiolabeled receptor assay. Furthermore, the antibodies recognise both occupied and unoccupied receptors. The immunohistochemical assay (ERICA, Abbott's) permits visualization of receptor distribution.[16,17]

As hormone receptor determination in this province is assayed by single reference laboratory, this has enabled us to review the results of specimens referred from peripheral community hospitals *vis à vis* our hospital (Victoria General).

*Preliminary communication at the 35th Annual Canadian Society of Clinical Chemists Meeting, Montreal, June 2-6, 1991

[1]Medical Oncologist/Haematologist, Cancer Treatment and Research Foundation of Nova Scotia, Halifax, N.S.
[2]Head, Endocrine Laboratory, Victoria General Hospital, Halifax, N.S.
[3]Supervisor, Endocrine Laboratory, Victoria General Hospital, Halifax, N.S.

MATERIALS AND METHODS

For the past three years, a uniformly standardized assay has been employed in all hormone receptor determinations.

Tissue samples (1397) taken from a -70°C freezer were weighed (0.3 gm), pulverized, homogenized, centrifuged (100,000 × g) and assayed for ER and PR according to Abbott's ER and PR enzyme quantitative immunoassays for receptors in tissue cytosols.

Results are expressed as percent and as negative (neg) or positive (pos)

	VGH SAMPLES (N=328)	REFERRED-IN SAMPLES (N=1069)
Pos ER/Pos PR	55.5	60.3
Pos ER/Neg PR	12.5	10.7
Neg ER/Pos PR	8.2	6.4
Neg ER/Neg PR	23.8	22.6

DISCUSSION

The differences in assay results between the VGH and referred-in samples were insignificant ($p<0.05$ by the standard normal z two-tailed test statistic for sample proportions).

The maintenance of quality assurance in determining hormone receptor assays is an important matter given the multiple variables that may alter such clinically relevant results. Proper handling and transportation of specimens to the reference laboratory are crucial. Upon surgical excision prompt deep freezing (-70°C) of tumor tissue and shipment with dry ice are necessary. The tissue must not be preserved in fluids used for histopathology or contaminated with Optimum Cutting Temperature (OCT) embedding compound for frozen sections.[16]

It is reassuring to see that referred-in samples from a variety of peripheral hospitals not only have results congruent with those of the laboratory based reference hospital but are also in keeping with those in the literature.

Meaningful statistical comparisons between individual community hospitals and the reference centre are not possible, given the small number of samples from some of these centres. However, in reviewing the results from individual centres (data not shown) the relative proportion of the different hormone receptor groups generally does not show gross discrepancies from the mean total for each subgroup shown previously. □

ACKNOWLEDGEMENT

We would like to thank Mrs. Kim Steeves for typing this document.

References

1. Osborne K. Heterogeneity in Hormone Receptor Status in Primary and Metastatic Breast Cancer. *Semin Oncol* 1985; **12:** 317-326.
2. Thorpe SM. Estrogen and Progesterone Receptor Determinations in Breast Cancer. *Acta Oncol* 1988; **27:** 1-19.
3. Osborne CK. Receptors In: Harris Jr, Hellman S, Henderson C, Kinne DW, eds. *Breast Disease.* Philadelphia; JB Lippincott, 1987: 210-232.
4. Knight WA III, Livingstone RB, Gregory ET, McGuire WL. Estrogen Receptor As an Independent Prognostic Factor for early recurrence in Breast Cancer. *Cancer Res* 1977; **37:** 4669-4671.
5. Clark GM, McGuire WI. Steroid Receptors and Other Prognostic Factors in Primary Breast Cancer. *Semin Oncol* 1988; **15** (suppl 1): 20-25.
6. McGuire WL, Tandon AK, Allred DC. *et al. J Natl Cancer Inst* 1990; **82:** 1006-1015.
7. McGuire WL, Horwitz KB, Zava DT. Progress in Endocrinology and Metabolism: Hormones in Breast Cancer:Update 1978. *Metabolism:* 1978; **27:** 487-501.
8. Clark GM, McGuire WL, Progesterone Receptors and Human Breast Cancer. *Breast Cancer Res Treat* 1983; **3:** 157-163.
9. Henderson IC, Harris Jr, Hinne DW, Hellman. Cancer of the Breast. In: De Vita V.T., Hellman S., Rosenberg S.A. eds. *Principles and Practice of Oncology* Vol. 1 Philadelphia: J.B. Lippincott, 1989: 1199-1268.
10. Robert Jr, Martin L, Taylor CD, Popkin J, Parkinson DR, White C. Nuclear Binding of the Estrogen Receptor: A Potential Predictor For Hormone Response in Metastatic Breast Cancer. *Breast Cancer Res Treat* 1990; **16:** 273-278.
11. Clark GM, McGuire WL, Hubay CA, Person OH, Marshall JS. Progesterone Receptors As a Prognostic Factor In Stage II Breast Cancer. *N Eng J Med* 1983; **309:** 1343-1347.
12. Neville AM. Prognostic Factors And Primary Breast Cancer. *Diag. Oncol* 1991; **1:** 53-63.
13. Aitken SC, Lippman ME. Effect of Estrogens and Antiestrogens on Growth Regulatory Enzymes in Human Breast Cancer Cells in Tissue Culture. *Cancer Res* 1985; **45:** 1611-1620.
14. Dickson RB, Lippman ME. Growth Factors and Oncogene. In: Powks TJ, Smith IE., eds. *Medical Management of Breast Cancer.* London: Martin Dunitz, 1991: 5-18.
15. O'Malley BW. Steroid Hormones Receptors as Transactivators of Gene Expression. *Breast Cancer Res Treat* 1991; **18:** 67-71.
16. Jordon VC, Wolf MF, Mirecki DM, Whitford DA, Welshons WV, Hormone Receptor Assays. Clinical Usefulness In the Management of Carcinoma of the Breast. *CRC Critical Reviews For Clinical Laboratory Services* 1988; **26:** 97-152.
17. Bookman MA, Goldstein LJ, Schep RM. Medical Management of Early Breast Cancer. Haskell C.M. ed. *Curr Probl Cancer* 1991; July/August: 161-231.

EPSTEIN BARR VIRUS INFECTION AND INFECTIOUS MONONUCLEOSIS

Continued from page 177.

6. Davidsohn I, Lee CL. The clinical serology of infectious mononucleosis. In: Carter RL, Penman HG, eds, *Infectious Mononucleosis.* Oxford: Blackwell Scientific Publications, 1969: pg 177-200.
7. Henle W, Henle GE, Horwitz CA. Epstein-Barr virus specific diagnostic tests in infectious mononucleosis. *Human Pathol* 1974; **5:** 551-565.
8. Rickinson AB. Cellular immunologic response to the virus infection. In: Epstein MA, Achong BG, eds. *The Epstein-Barr Virus: Recent Advances,* New York: John Wiley and Sons, 1988: pg 75-125.
9. Thorley-Lawson, D.A. Basic virological aspect of Epstein-Barr virus infections. *Seminars in Hematol* 1988; **25:** 247-260.
10. Shibata D, Weiss LM, Nathwani BN, Brynes RK, Levine AM. Epstein-Barr virus in benign lymph node biopsies from individuals infected with the human immunodificiency virus is associated with concurrent or subsequent development of non-Hodgkin's Lymphoma. *Blood* 1991; **77:** 1527-1533.
11. Hanto DW, Gajl-Peczalska KJ, Frizzera G, Arthur DC, Balfour HH, McClain K, Simmons RL, Najarian JS. Epstein-Barr virus (EBV) induced polyclonal and monoclonal B-cell lymphoproliferative diseases occurring after renal transplantation, clinical, pathologic, and virologic findings and implications for therapy. *Ann Surg* 1983; **198:** 356-368.
12. Nalesnik MA, Makowka L, Starzl TE. The diagnosis and treatment of posttransplant lymphoproliferative disorders. *Current Problems in Surgery* 1988; **25:** 365-472.

Problems with Central Venous Access Devices (Port-A-Cath)

B. Colwell,[1,5] MD, R. MacCormick,[2,5] MD, FRCPC, D. Campbell,[3,6] MD, FRCPC and G. Hirsch,[4,5] RN, MSN

Halifax, N.S.

Permanent implantable central venous access devices (ICVADs) have a major impact on the delivery of chemotherapy and thus on the quality of life of cancer patients. In Nova Scotia it is estimated 1 in 4 patients receiving chemotherapy will at some time have a port-a-cath inserted. These are also used for various other patients who need multiple treatments which involve frequent venous access including cystic fibrosis, acute intermittent porphyria, and hyperalimentation. This advance in technology, however, is not without some drawbacks.

The following case histories describe 3 different problems with port-a-caths, including:

1. embolization of catheter
2. extravasation
3. thrombosis of axillary vein.

Case History 1

A twenty-four year old male was diagnosed in March 1987 with teratocarcinoma of the testicle. At the time of his initial surgery the disease was confined to the testicle only. However, follow-up in July 1987 revealed recurrence with extensive periaortic lymphadenopathy and multiple pulmonary metastases.

He started systemic chemotherapy and an implantable central venous access delivery system was inserted. Following chemotherapy, he underwent retroperitoneal lymph node dissection which failed to show any evidence of residual viable disease. Since that time he has been followed routinely and has been disease free.

In November 1988, during a routine follow-up, he was scheduled to have his ICVAD flushed. There was difficulty in flushing and an x-ray at that time revealed that the ICVAD tip had broken off at the insertion of the subclavian vein and was lying in the right lower lobe of the lung (see x-ray Figure 1).

Further questioning revealed that this gentleman was having left sided chest pain and intermittent palpitations. Physical examination was unremarkable. He was admitted to hospital for removal of the dislodged ICVAD. In an hour-long procedure a 10 cm long piece of catheter was removed (Figure 2) using a loop basket. Approximately one week after the procedure a chest x-ray and lung scan showed no abnormalities.

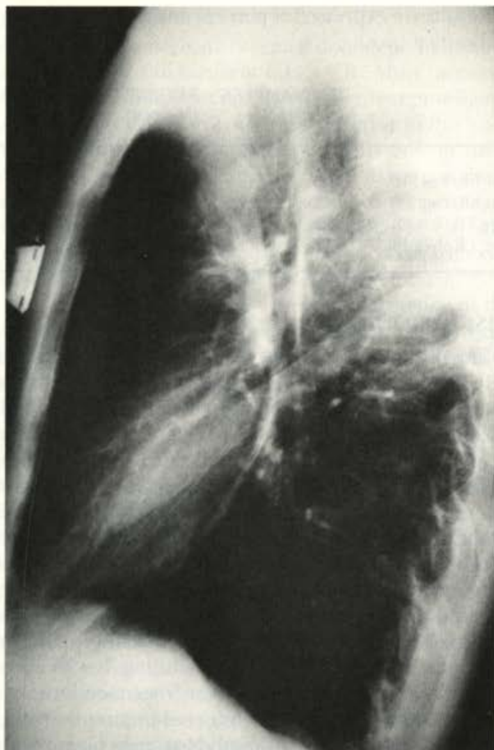


Fig. 1 Left lateral x-ray of dislodged ICVAD in chest before removal.

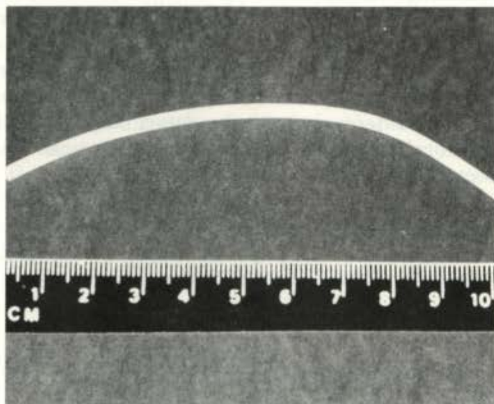


Fig. 2 ICVAD embolized portion.

Clinical Associate in Medical Oncology[1], Medical Oncologist[2], Clinical Trials Nurse[4], Cancer Treatment & Research Foundation of Nova Scotia, Halifax Clinic[5], Assistant Head, Department of Radiology[3], Victoria General Hospital[6], Halifax, N.S.

Correspondence: Ms. G. Hirsch, Cancer Treatment & Research Foundation of Nova Scotia, Halifax Clinic, 5820 University Avenue, Halifax, N.S. B3H 1V7

Procedure for Removal of ICVAD

A 9 French introducer set and sheath with a check-flow seal was passed into the right femoral vein under local anaesthesia. A right pulmonary arteriogram was done using a Beamish pigtail catheter. No thrombus was seen about the ICVAD catheter fr agment which was located in the right descending pulmonary artery.

A 3 French end-hold catheter was then passed into the right pulmonary artery and a loop fashioned from the core of a 260 cm guide wire was passed through the catheter. It was not possible to pass the loop over the fragment.

An 8 French Dotter Intravascular Retriever set with a stainless steel helical loop basket was then substituted for the 8 French catheter and wire loop system. The catheter fragment was easily trapped in the basket and withdrawn to the groin where the sheath, retriever and fragment were removed together.

Case History 2

A 24 year old gentleman presented in March of 1988 with swelling of the left side of neck which was subsequently diagnosed as nodular sclerosing Hodgkin's disease. Workup revealed a large mediastinal mass. He was subsequently admitted to hospital for the insertion of a ICVAD due to his need for intensive chemotherapy.

Under fluoroscopic control, he had a port-a-cath inserted in his left subclavian vein. He subsequently had one course of chemotherapy which he tolerated quite well. He had a second course of chemotherapy consisting of Adriamycin and Bleomycin. Apparently after his chemotherapy he became very ill with nausea and vomiting and the day following noticed a very large swelling in his neck.

When examined he had a very swollen, tender, hot erythematous area in the left side of the neck and was febrile. He was admitted to hospital and treated with antibiotics. A venogram was done through his port-a-cath which initially showed blood return. However there was obvious extravasation into the soft tissues of his neck region. (See x-ray Figure 3.) Extravasation was caused by proximal migration of the port-a-catch tip out of the subclavian vein. He subsequently had the port-a-cath removed.

Fortunately this man recovered from the extravasation with no complications.

Case History 3

A 67 year old female, who had been well all her life with the exception of hypertension, presented with rectal bleeding and was subsequently diagnosed with cancer of the rectum which was surgically resected. She went on to receive adjuvant radiotherapy. Further follow-up revealed multiple lesions in her liver on CT scanning which were biopsied and found to be positive for adenocarcinoma. She was offered a trial of chemotherapy with continuous pump infusion of 5 FU via a port-a-cath.

Her port-a-cath was inserted in November 1988 and the procedure was complicated by a small pneumothorax, which spontaneously resolved. Two weeks post insertion, she developed an axillary vein thrombosis on the side of the port-a-cath and was treated with non-steroidal anti-inflammatory drugs. She went on to receive chemotherapy and, after her second course she presented with a venous thrombosis of the superior vena cava, which was documented by a venogram (see Figure 4 – venogram). It was felt that this was a complication of the port-a-cath aggravated by a cancer-induced hypercoaguable state. She was started on heparin and fully anticoagulated. Despite therapy with Warfarin, the patient went on to develop small pulmonary embolus with continued symptoms from the axillary vein thrombosis. After consultation with the haematologist, the patient was hospitalized and subcutaneous heparin was added to the Warfarin. Post hospitalization, it was noted that her cancer was no longer responding to the single agent therapy and a new regimen was instituted. The patient eventually succumbed to her disease.

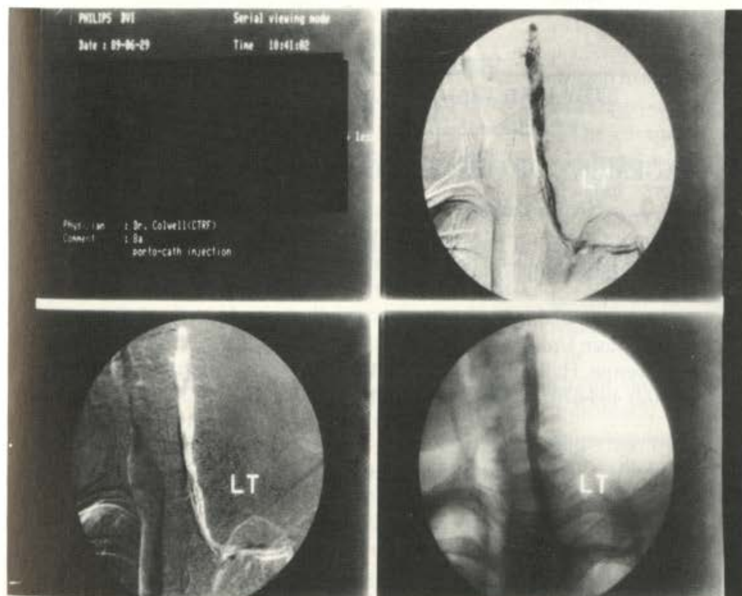


Fig. 3 Extravasation

DISCUSSION

Permanent implantable intravenous delivery systems are frequently used in patients requiring long-term chemotherapy.

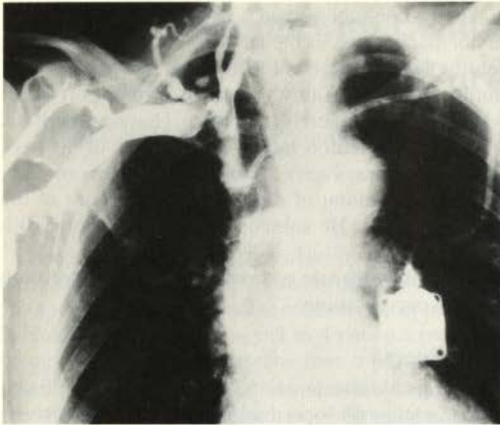


Fig. 4 Thrombosis.

The use of this device is associated with a number of complications. With the insertion of the catheter there are the associated possibilities of creating a pneumothorax or haematoma around the site of the insertion. Once the ICVAD has been inserted there is a 3-13% incidence of infective complications.[1,2] Another major complication is that of venous thrombosis as described in case #3. It has been theorized that the placement of the catheter tip at or near the right atrium helps to keep the catheter free of debris and lower the incidence of thrombosis.[3] It has also been theorized the larger the length of catheter, such as used in brachial port-a-caths, predisposes to a higher incidence of thrombosis.

Embolization of the catheter may be secondary to a pincer effect produced by the clavicle, the first rib, and the costoclavicular ligament.[4] The normal motion of the arm and shoulder with the catheter in a medial location, may produce this pincer effect.

The successful retrieval of the embolized segment can be quite difficult. This, of course, depends on the place where the catheter finally comes to rest. As described above, in this particular case the segment was retrieved using a vascular loop basket with approach through the femoral vein.

Finally, use of an ICVAD does not exclude the possibility of extravasation. In situations where easy blood return is not demonstrated, venogram should precede use of chemotherapy.

CONCLUSION

Implantable central venous access devices are the preferred type of venous access system in patients receiving long-term chemotherapy, especially in those with poor peripheral veins. The complications can be kept to a minimum by placing the catheter laterally to avoid compression between the clavicle and the first rib, and ensuring the catheter tip is placed close to the right atrium with the length of catheter in the patient minimalized. Catheter placement should be confirmed before use of the device and easy blood return demonstrated. □

References

1. Leclerk YE, Loutfi A. Implantable Device for Venous Access. *Can J Surg* 1987; **30:** 127-9.
2. Press OW, Ramsey PG, Larson EB et al. Hickman Catheter Infections in Patients with Malignancies. *Medicine (Baltimore)* 1984; **63:** 128-200.
3. Stanislav GV, Fitzgibbons RJ, Bailey RT Jr., Maillard JA, Johnson PS, Feule JB. Reliability of Implantable Central Venous Access Devices in Patients With Cancer. *Arch Surg* 1987; **122:** 1280-3.
4. Aitken DR, Minton JP. The 'Pinch-Off Sign': A Warning of Impending Problems with Permanent Subclavian Catheters. *Am J Surg* 1984; **148:** 633-6.

NOW AVAILABLE

2nd Edition

"ESSENTIAL MANAGEMENT OF OBSTETRIC EMERGENCIES"

By T F Baskett

Published by Clinical Press Ltd, Bristol

ISBN 1 85457 022 6

Available from:

Dalhousie University Bookstore

University Avenue, Halifax, Nova Scotia B3H 3J5

[Tel: (902) 494-6702 Fax: (902) 494-3863]

Price: Approximately $30.00

FROM REVIEWS OF THE FIRST EDITION:

Canadian Medical Association Journal

"Clear, concise and immensely practical this book will be valuable for both rural hospitals and teaching centres.

Lancet

"It can be recommended for mid-wives, general practitioners and obstetricians in training who want a clear explanation of present problems and their management."

Current Topics in Community Health

Selected by: Dr. David R. MacLean
Department of Community Health & Epidemiology
Dalhousie University, Halifax, N.S.

INTRODUCTION

Hepatitis B is an important cause of hepatitis in our society and a disease which health care personnel should take particular note. In particular, physicians and others who are exposed to the blood and body fluids of patients are at increased risk to acquiring Hepatitis B unless appropriate preventive measures are taken. These include the application of universal precautions as well as active immunization against Hepatitis B. Since the early 1980s, Hepatitis B immunization has been available in Canada and experience to date has found the vaccine to be both effective as well as relatively free of side effects.

Recent events in Halifax with the impact on the practice life of one orthopaedic surgeon, clearly indicate the importance of physicians and other health personnel protecting themselves from acquiring this disease. Recent reports that have occurred in the popular press originating from rather dubious sources as to potential side effects of the Hepatitis B vaccine and chronic fatigue syndrome deserve to be addressed. It is important that all individuals who become immunized with this vaccine be confident that it will not likely do them any harm. This addition of Current Topics in Community Health reviews this important subject by printing in total an article which appeared in the *Canadian Diseases Weekly Report* for October 5, 1991.

ALLEGED LINK BETWEEN HEPATITIS B VACCINE AND CHRONIC FATIGUE SYNDROME

In 1989, 3,456 cases of hepatitis B were reported in Canada. It is generally accepted that the true incidence of the disease is approximately 10 times the reported incidence.

Hepatitis B virus is a major cause of acute and chronic hepatitis, cirrhosis, and primary hepatocellular carcinoma. Ten percent of infected adults and 90% of infected infants may develop chronic hepatitis that may progress to cirrhosis and hepatocellular carcinoma. In its acute form, hepatitis B is fatal in a small number of cases. The disease is transmitted through sexual contact, infected blood and other body fluids. Carriers frequently show no symptoms until later in life, and may, therefore, infect others unknowingly.

Hepatitis B vaccine has been used in populations that have an established risk of infection with known consequences, e.g., health-care workers, male homosexuals and injection drug users.

Recent attention in the Canadian press has focused on the possible association between immunization against hepatitis B and chronic fatigue syndrome (CFS).

CFS is a non-specific condition of unknown etiology. Definition of the syndrome has proven difficult because of the nature of the complaints. There is no objective test available to confirm or deny the diagnosis, which is made in part by excluding other diseases. There are conflicting immunologic and viral data regarding the causes of CFS. One hypothesis is that it may be due to one or more immune disorders that are the result of acquisition of an infectious agent[1].

The Nightingale Research Foundation, incorporated as a charitable foundation in 1988, has recently stated that CFS is linked to the administration of hepatitis B vaccine. This claim results in part from a francophone television network program in October 1990, on which a nurse contended that she had developed CFS following hepatitis B immunization. The program announced a toll-free number and encouraged viewers to call if they had similar experiences. Sixty-nine persons contacted the television station. These reports were later forwarded to the Laboratory Centre for Disease Control (LCDC) for investigation.

A questionnaire was developed to look at possible trends in the symptoms reported and the latency between receipt of the vaccine and the onset of symptoms. Multiple attempts were made to contact these persons. Between March and June of this year, 60 of the 69 persons were successfully contacted and all but one agreed to participate in the LCDC study. The age of the 59 persons ranged from 2 to 59 years, with a mean and median of 37 years. Fifty-one (86.4%) were females.

The internationally recognized CDC case definition of CFS[2] was used to assess the prolonged fatigue, 1 of the 2 major criteria which must be satisfied. Thirty one (54%) met this definition.

Hepatitis B vaccine was administered to these patients between 1983 and 1990. All 3 hepatitis B vaccines thus far licensed in Canada were among the vaccines received in relative proportion to the number of doses distributed. The time of onset of fatigue after administration of the vaccine ranged from one hour to one year. Of these 31 individuals, 14 (45%) reported having been given the following diagnoses prior to the study: rheumatoid arthritis (2), multiple sclerosis (2), hepatitis (1), CFS (2), fibromyalgia (5), fibromyositis (1), and depression (1). None of this information has yet been corroborated with the treating physicians and/or the medical records. This investigation is complicated because health-care providers are disproportionately represented but, as a group, are more likely to be vaccinated against hepatitis B.

No conclusive epidemiologic association can be made at this time between any of these adverse events and the vaccine nor is there any scientific basis to suggest that CFS follows immunization with the hepatitis B vaccine. Occasionally some medical events do occur coincidentally after immunization that are not causally related to the administration of the vaccine.

This is the first time that such an allegation has been made of a possible association between CFS and receipt of hepatitis B vaccine. A workshop on CFS[3], held in Toronto in September 1989 involving North American experts, did not identify this association. Furthermore, various centres across North America, Europe and WHO currently involved in the etiologic investigation of CFS do not consider vaccine administration as a likely cause.

Further investigation will be conducted to determine the actual diagnosis of these persons. LCDC will continue to monitor reported adverse medical outcomes after receipt of hepatitis B vaccine.

Adverse events due to administration of any vaccine are of great concern to public health officials in many countries. Nevertheless, in spite of careful vigilance by such officials, serious adverse reactions to hepatitis B vaccine are rarely found. An extensive review of post-marketing surveillance for adverse reactions is described by Shaw et al.[4].

Over 20 million doses of the plasma-derived and recombinant types of hepatitis B vaccines have been used worldwide. Approximately 1 million doses have been distributed in Canada. Using data collected through post-marketing surveillance, the rates of any reported adverse events following any of the 3 licensed vaccines is approximately 22 per 100,000 doses distributed.

Source: Field Epidemiology Division and Child Immunization Division, Bureau of Communicable Disease Epidemiology, LCDC, Health and Welfare Canada, Ottawa.

References

1. Landay AL, Jessop C, Lennette ET, Levy JA. *Chronic fatigue syndrome: clinical condition associated with immune activation.* Lancet 1991;338: 707-12.
2. Holmes GP, Kaplan JE, Gantz NM, et al. *Chronic fatigue syndrome: a working case definition.* Ann Intern Med 1988;108:387-89.
3. *Proceedings of a Workshop: Chronic Fatigue Syndrome, 28-29 September 1989, Toronto, Ontario.*CDWR 1991;17S1E:1-71.
4. Shaw FE, Graham DJ, Guess HA. *Postmarketing surveillance for neurological adverse events reported after hepatitis B vaccine.* Am J Epidemiol 1988;127:337-52.

An Appreciation

DR. NEIL KENNETH MacLENNAN

Dr. N.K. MacLennan, BA, MDCM, FRCS(C), died on August 31, 1991 at the age of 68. He practised his specialty in Sydney until March 1991. Born in St. Peters, Cape Breton, he graduated from Mount Allison and Dalhousie Universities. He was life president of the 1948 graduating class of the Dalhousie Medical School. Following his graduation, he took post graduate studies in Halifax. He moved to Sydney in 1952. He was the first fully qualified specialist in Obstetrics and Gynecology to set up a referral practice.

He was past president of the Sydney Rotary Club, Clan MacLennan (Atlantic) and a former chairman of the Board of Governors of the University College of Cape Breton. As a member of the Royal College of Physicians and Surgeons, he served on the executive council and was recently honored with a senior membership in the Canadian Medical Association. He also served on the N.S. Hospital Insurance Commission for 11 years. He was past president of the Atlantic Society of Obstetrics and Gynecology Cape Breton Medical Society and active in our local societies.

Under his guidance, many changes were made over the years in the Obstetrics and Gynecology Departments in the Sydney hospitals.

N.K. was a quiet but enthusiastic man who always seemed to find time to give his best to his community, medical affairs, patients and his family. He had a wonderful sense of humor and enjoyed the simple things in life.

In his earlier years, he looked forward to fishing and hunting, especially at Lake Ainslie where his family had roots. He enjoyed gardening and sailing at his home on the Mira River.

Those who knew him admired his many talents: sketching, watercolors, artistic welding, music and writing short stories. His ability to write humorous poetry to mark special events or to deliver a thoughtfully prepared speech was well recognized.

Our sincere condolences go to his wife Freda, seven children, three stepchildren and twelve grandchildren.

We have lost a valuable colleague and a dear friend.

Dr. L.S. Allen,
Sydney, N.S. □

Dr. William Grigor

FIRST PRESIDENT OF THE MEDICAL SOCIETY OF NOVA SCOTIA

A.E. Marble,* PhD, PEng

Halifax, N.S.

Dr. Grigor was born[1] in Elgin, Scotland, circa 1798, and obtained his medical education through apprenticeship as well as by attending lectures in the Faculty of Medicine at the University of Edinburgh during the two year period 1814 to 1816.[2] On 7 October 1817 he qualified[3] as a Licentiate of the Royal College of Surgeons of Edinburgh (LRCS) and, shortly after, emigrated to Nova Scotia where he established a practice in what is now known as Antigonish County.[4] Just exactly what attracted him to Nova Scotia is not known, however, as this brief biography will show, the Province had gained an astute and competent doctor as well as a leader and a humanitarian. He appears to have practised in the Antigonish area from 1819 to 1821, but sometime in the latter year he moved his practice to Truro.[5] Bishop John Inglis mentions Dr. Grigor as one of the group of Church of England parishioners who greeted him on his visits to Truro on two occasions, 27 August 1823 and, 25 November 1825.[6]

On 4 November 1826, Dr. Grigor placed an advertisement card in the *Acadian Recorder* newspaper explaining that he had moved from Truro to Halifax and stating that he "intends to practise surgery and midwifery". He took up residence on Barrington Street opposite Dalhousie College, and on 14 April 1827 married Catherine Louisa Forman, fourth daughter of James Forman of Halifax, and they made their home on Hollis Street.[7] Dr. Grigor appears to have moved up in the medical, social, and literary circles in Halifax very rapidly as evidenced by his membership in a select group which included Joseph Howe, Thomas C. Haliburton, Lawrence O'Connor Doyle, and Captain J. Kincaid. The group gathered in Howe's parlour and discussed and wrote a series of clever articles for the *Novascotian* under the title "The Club".[8] These articles appeared in that newspaper between May 1829 and June 1831 ". . . lampooning the follies and foibles of the day, particularly those incident to legislative activities."

From 1827 to 1831, Dr. Grigor assisted Dr. Charles Wallace as Health Officer for the Port of Halifax[9], and in 1829 he joined with Dr. John Stirling in establishing the Halifax Dispensary on George Street.[10] This Dispensary had been moved to Bedford Row by 1837[11], and to Granville Street by 1839.[12] The Dispensary was open to the public for an hour per day during which Drs. Grigor and Stirling gave free medical attention to anyone asking for such. During the 1830s and 1840s their Dispensary treated 1,500 patients annually[13], and although Dr. Stirling died in 1837[14], Dr. Grigor continued the Dispensary with the latter's son, Dr. Thomas Stirling and, later, Dr. Daniel M. Parker, as his associates.[15] Dr. Grigor and Dr. Parker continued to operate the Dispensary until it burned to the ground on 1 January 1857 in the same fire which destroyed St. Matthew's Church.[16]

In 1831, Dr. Grigor was one of the founding members of the Halifax Mechanics Institute and he served as its first President from 27 December 1831 to 23 December 1833.[17] The Mechanics Institute was a forum for the presentation of state of the art scientific papers and flourished in Halifax for many years. During the period 1832 to 1844 he gave a total of twenty-six lectures at the meetings of the Mechanics Institute on such wide ranging scientific topics as: optics, anatomy, pneumatics, acoustics, animal magnetism, and the nervous system. Dr. Grigor also gave presentations on Fine Arts, painting, the philosophy of the mind, Baconian Philosophy, Education, Transcendental Philosophy, and the Harmony of Nature.[18]

Dr. Grigor was appointed Health Warden[19] for the South Ward of Halifax on 17 April 1832, and a Member of the Board of Health on 26 July of that year.[20] Health Wardens and the Board Of Health were established in Halifax in 1832 to deal with the threat of an approaching cholera epidemic which devastated Montreal during the spring and summer of 1832. It arrived in Halifax in August 1834 and, it is estimated, carried away over two hundred victims. Dr. Grigor was also among the medical doctors who unsuccessfully petitioned the government for a public hospital for Halifax in 1840[21], and in 1841 was appointed Commissioner to Control Schools in Halifax County.[22] In 1848, he was appointed to the Board of Governors of Dalhousie College[23], Coroner for Halifax County[24], and to form a Central Board of Health in Halifax.[25] The many appointments which he received culminated in 1849 when Dr. Grigor was appointed to the Legislative Council of Nova Scotia and he continued to sit in that House until his death in 1857.[26] Unfortunately for Dr. Grigor there were numerous negative statements made concerning his appointment to the Council. The Editor of the *Novascotian* maintained that "the Administration had committed a great mistake" and although Dr. Grigor was described as a "gentleman of moral worth and highly respectable literary attainments" the editorial went on to infer that Dr. Grigor had been appointed so that the Legislative Council would have a majority of members of the Church of England. The House of Assembly had recently voted in favour of repealing the permanent grant to King's College in Windsor,

*Associate Professor of Surgery, Dalhousie University, and Secretary-Treasurer of the Dalhousie Society for the History of Medicine.

but when the vote was held in the Council, the repeal bill was defeated by only two votes, one being Dr. Grigor's.[27] The Legislative Council was similar to Canada's Senate, but had the power to defeat bills which had previously been passed in the House. The Legislative Council of Nova Scotia was abolished in 1928.

Dr. Grigor continued to be a leader in the Medical Profession in Halifax and, when the Medical Society of Nova Scotia was established in 1854 he was elected to be its first President, serving in that office from 5 October 1854 to 1 August 1855.[28] During the 1850s, Dr. Grigor received further appointments including Surgeon-General of the Militia for Nova Scotia[29], and as an Examiner of candidates seeking registration into the medical profession under the Medical Act of 1856.[30]

Dr. William Grigor died in Halifax on 27 November 1857, and was survived by his wife and four of his nine children.[31] His obituary stated that he would be remembered "for his love of art, his scientific knowledge, his social and companionable qualities, and his graceful bearing and gentlemanly manners . . .". His eldest son, William Evelyn Grigor studied medicine at the University of the City of New York from which he was awarded an M.D. in 1851.[32] Dr. William Grigor Jr. practised in Halifax for a few years and, like his father, was one of the original members of the Medical Society of Nova Scotia.[33] He died in Halifax on 19 December 1858 in his 30th year.[34] Dr. Grigor Sr., while President of the Mechanic's Institute, sat for a portrait which was painted by William Valentine. This portrait is now part of the Collection of the Nova Scotia Museum, and a photograph of the painting accompanies this biographical sketch.[35] □

Footnotes

1. *Novascotian,* 30 November 1857, p.1, gives his obituary and indicates that he was born in Elgin, Scotland, as does the inscription on his gravestone in Camp Hill Cemetery. R.V. Harris, in his book entitled *The History of St. Andrew's Lodge,* p.88, wrote that Dr. Grigor was the son of William Grigor of Halifax but does not give any indication of the source where he obtained that information.
2. Edinburgh University Matriculation Records, viewed by the author in August 1986, show that William Grigor of Elgin, Scotland, attended lectures offered by the Faculty of Medicine of that University during 1814-15, and 1815-16.
3. Public Archives of Nova Scotia (hereafter referred to as PANS), RG25 Series 'C', Vol.10, No.1, Medical Register of Nova Scotia. It should be noted that the article on Dr. William Grigor which appears in the *Dictionary of Canadian Biography,* Vol.8, pp.348-349, states that he was awarded an M.D. by Edinburgh, whereas *Edinburgh Medical Graduates, 1705 to 1861,* published by that University in 1861, does not list him as a recipient of an M.D.
4. PANS RG5 Series GP, Vol.10, Petition of Samuel Simonds, dated March 1820. This petition mentioned that the estate of James Bradshaw owed Dr. Grigor for medical attendance given to Bradshaw during his illness.
5. *Halifax Sun,* 27 November 1857, gives his obituary and indicates that he spent five years practising in Truro.
6. PANS Micro, Biography, The Journals and Letter Books of Bishop John Inglis.
7. *Acadian Recorder,* 21 April 1827.
8. Beck, J.M. .: *Joseph Howe, Conservative Reformer, 1804-1848.* Vol.1, McGill-Queen's Press, Montreal, 1984, p.55.
9. Journal of the House of Assembly, 1832, Appendix 44.
10. PANS RG5 Series P. Vol.42, Petitions 83, 84, and 113.
11. *Belcher's Almanac,* 1837.
12. *Ibid,* 1839. The article on Dr. Grigor in the *D.C.B.* infers that the Dispensary had only one location, i.e.: Granville Street, however, as 10f and 11f show, the Dispensary was first located on George Street, was moved to Bedford Row, and finally to Granville Street.
13. Reports of the number of patients admitted to the Dispensary appear in the *Acadian Recorder,* 13 July 1833, 8 February 1834, and 2 August 1834, as well as in the *Novascotian,* 11 January 1838, 10 January 1839, and 9 January 1840.
14. *Acadian Recorder, 23* December 1837.
15. Journal of the House of Assembly, 1838, p.276, gives Dr. Thomas Stirling (son of Dr. John Stirling) as Dr. Grigor's associate at the Dispensary as does the Journal for each year up to and including 1846. On 27 February 1846, Dr. Thomas Stirling died, and Dr. Daniel M. Parker became Dr. Grigor's new associate.
16. *Acadian Recorder,* 3 January 1857, p.2, col.5.
17. Fergusson, C.B.: Mechanics Institutes of Nova Scotia, *Bulletin of PANS,* No.14, p.36, 1960.
18. PANS MG20 Vol.222A, Halifax Mechanics Institute, 1832-1846.
19. PANS RG1 Vol.174, p.334.
20. *Ibid.,* p.352.
21. Journal of the House of Assembly, 1838-1840, p.693, and Appendix 22.
22. PANS RG1, Vol.175, p.171.
23. *Ibid.,* p.518.
24. *Ibid.,* p.523.
25. *Ibid.,* p.538.
26. *Ibid.,* p.551, and the *Novascotian,* 26 February 1849, p.66.
27. *Novascotian,* 12 March 1849, p.87, col.4.
28. *Nova Scotia Medical Bulletin,* Vol.32, 1953. A complete list of the officers of the Medical Society for its first hundred years follows page 273 in Vol. 32.
29. *Morning Chronicle,* 21 August 1854.
30. PANS RG7, Records of the Provincial Secretary of Nova Scotia, Vol.37, 1857.
31. *Novascotian,* 30 November 1857, p.1 (obituary).
32. *General Alumni Catalogue,* New York University, 1916.
33. *Nova Scotia Medical Bulletin,* Vol. 32, p.240, 1953.
34. *Novascotian,* 27 December 1858, p.7.
35. *Report of the Provincial Museum,* Halifax, 1911, p.24.

Ellen Hrubsa

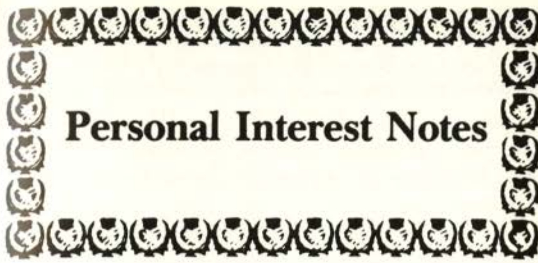
Skin Care Specialist

and Electrologist

(20 Years of Experience)

Mario Maria
Hair Designers
420-0455

1200 Tower and South
Halifax, N.S.
B3H 2Y8



SENIOR MEMBERSHIP CITATIONS THE MEDICAL SOCIETY OF NOVA SCOTIA

Dr. Howard A. Locke

Born and raised in Liverpool, Nova Scotia; a graduate of Queen's County Academy, Howard received a Bachelors Degree from Mount Allison University and M.D.C.M. from Dalhousie University in 1945. After service in the R.C.A.M.C. he began general practice in New Glasgow and Thorburn, Pictou County where he has continued for the past 45 years. He has been on the Medical Staff of Aberdeen Hospital during these years, with special interest in Obstetrics and Pediatrics, serving on various medical committees and offices. Some of his other activities have been as an elder in St. Andrews Church, Pictou County Y's men and YM-YWCA, United Way, North Shore Drug Dependency, Heather Figure Skating Club and Historic Mill Restoration at MacPherson's Mills. Howard enjoys skating, swimming, skiing, choir singing and italic writing, and things historical.

Dr. C.R. Elliott,
President, Pictou Branch Society

Dr. Alan John MacLeod

Alan grew up in Prince Edward Island, served in World War II, then graduated form Dalhousie University Medical School. After practising for six years as a General Practitioner, he returned to Dalhousie, trained in Internal Medicine and became a Fellow of the Royal College of Physicians and Surgeons of Canada. He achieved the rank of full Professor of Medicine in the Dalhousie Faculty of Medicine. He pursued a clinical career in Renal Medicine and was instrumental in the development of the Subspecialty of Nephrology and Renal Dialysis in Nova Scotia and the Maritime Provinces. Alan has received much academic and community recognition for this work.

Of much significance to Physicians of Nova Scotia, he has dedicated part of his life to their service as an active member of the Halifax Branch Society, the Provincial Society and as the President of The Medical Society of Nova Scotia.

Alan is an example of the importance of interests outside of Medicine and is intensely physically active, known for his stamina and energy. He has contributed much to Medicine and life in Nova Scotia. I am reminded of conversations - medical and non-medical - with him and have always been impressed by his wise counsel.

Dr. R.D. Gregor,
President, Halifax Branch Society

Dr. Richard Gordon Simpson

Born in Bay View, Prince Edward Island, April 21, 1926. Elementary schooling took place at Bay View and high school and his years of university at Prince of Wales in Charlottetown, which is now the University of Prince Edward Island. He entered Dalhousie Medical School in 1945 graduating in 1950. Following internship he practised for one year in Glace Bay and three years in Guysborough, Nova Scotia. He then enrolled in Post Graduate studies in Anaesthesia at the Royal Victoria Hospital in Montreal and the Montreal General. He then returned to the Maritimes - to Sydney, Nova Scotia in 1956. He has maintained and watched the Anaesthetic Department grow over the past 35 years.

In 1952 he married Elizabeth Louise Nunn of Sydney and they have five children, two girls and three boys and they also have ten grandchildren, eight boys and two girls.

Dr. Gail Bisson,
President, Sydney Branch Society

Dr. Lea Chapman Steeves

Lea comes to us via New Brunswick but was actually born in British Columbia. After graduating from Mount Allison, of which he is a dedicated alumus, he left for McGill Medical School, graduating with honours. He completed his training in Montreal and served his Country during World War II before coming to Dalhousie Medical School to which he has contributed enormously over the years. He attained the rank of Professor of Medicine and served in the Dean's Office as an Assistant and Associate Dean.

Lea's contributions to Medicine and his community are many. He has been active in Scouting and the Heart Foundation. He is a very active individual and an example of a healthy active lifestyle. He and Mrs. Steeves are well known for their skill on the dance floor.

As a superb clinician, accomplished teacher and compassionate physician, Lea is a role model for his students,

housestaff and colleagues. He has dedicated much of his time to the physicians of this Province as an active Member of the Halifax Branch, the Provincial Society and as President of The Medical Society of Nova Scotia.

Lea is best known for his interest and work in Continuing Medical Education. These efforts have been so important to Maritime Physicians that Dalhousie University has established in his name an award for Excellence in Teaching in Continuing Medical Education.

On our walks from Bloomingdale Terrace to the Victoria General, when Lea was still actively practising, I had many opportunities to discuss our common interests in teaching and cardiology. I was always impressed with his dedication and purpose.

Dr. R.D. Gregor,
President, Halifax Branch Society

Dr. Lynn McIntyre has been appointed the first woman Dean of the Faculty of Health Professions, Dalhousie University, and she is the second woman to be named a Dean, in less than two years. Currently, she is an epidemiologist with the IWK Children's Hospital, and an Assistant Professor in Pathology, in Community Health and Epidemiology, and in the International Studies Program.

Dr. McIntyre's five year appointment as Dean begins on January 1, and she will also hold joint appointments in the Schools of Health Services Administration and in Recreation, Physical and Health Education.

Dr. McIntyre has been responsible for selecting the regular "Current Topics in Community Health" section of this *Journal*, where she was also a member of the Editorial Board.

OBITUARIES

Dr. Charles B. Weld (92) of Halifax, Nova Scotia died on October 27, 1991. Born in Vancouver he received his medical degree from the University of Toronto. He moved to Halifax in 1936 to become a Professor of Physiology at Dalhousie Medical School where he remained until 1965. He taught at the school until 1969, when he became Professor Emeritus. His interest continued with the medical school until his death. He is survived by his wife, a daughter and two sons to whom the *Journal* extends sincere sympathy.

Dr. Douglas C. Cantelope (75) of Lunenburg, Nova Scotia died on October 31, 1991. Born in Northwest, Lunenburg County he received his medical degree from Dalhousie University in 1942. He practised medicine in the Lunenburg area until ill health forced his retirement. He was a member of The Medical Society of Nova Scotia and the Canadian Medical Association. He is survived by his wife, and two daughters. The *Journal* extends sincere sympathy to his family.

Dr. Douglas R. Norman (42) of Canning, Nova Scotia died on November 20, 1991. Born in Port Union, Newfoundland he received his medical degree from Dalhousie Medical School in 1974. He moved to Nova Scotia in 1984 to practise medicine in Canning and Kentville areas. He served as a member of the medical advisory committee and was a representative on the disaster planning committee and the standards committee. He was a member of The Medical Society of Nova Scotia and the Canadian Medical Association. He is survived by his wife and one daughter. The *Journal* extends sincere sympathy to his wife and daughter.

Smoking represents the most extensively documented cause of disease ever investigated in the history of biomedical research.

Antonia Novello,
US Surgeon General