

Acute Renal Failure*

D. J. Topping, M.D.**

Case Presentation

Mrs. M. H. - 32 yr. old, white, para 4, grav. 5.

Family History - One brother died with carcinoma of the stomach. Otherwise the family history was non-contributory.

Personal History - Ordinary diseases of childhood with good recovery. No other serious illnesses. No operations. No difficulty with deliveries. This patient has a history of considerable bleeding whenever she cuts herself. She has had several bouts of epistaxis in the past, but no history of excessive bruising or menorrhagia.

History of Present Illness - Last normal menstrual period was September 26, 1954. There was no bleeding except on a couple of occasions when there was spotting per vagina between the last menstrual period and the day of admission. The patient was admitted to the Gynaecological Service of the Victoria General Hospital at 7:15 a.m., January 14th, 1955 with a history of onset of vaginal bleeding beginning at 3 a.m. The patient was nauseated, vomited and had diarrhoea the afternoon before admission.

On arrival at hospital, the patient was in a state of shock, with a blood pressure of 60/20; pulse 120; respirations 30 and very marked restlessness. The patient was bleeding per vagina continuously.

Pelvic examination revealed an enlarged uterus of three months pregnancy. The os was open and the placental tissue removed, (the foetus had been passed at home) and Ergot was given. The management was also directed to combat the shock by infusion of O-negative blood, plasma and subtosan.

At nine in the morning the patient had responded sufficiently so that she was removed to the operating room where a D & C was performed and the uterus packed. On return to the recovery room the patient continued to bleed behind the packing. Even with continuous intravenous therapy the patient was not responding satisfactorily and she was taken to the operating room again and re-packed with 21 yards of packing. Again, in the recovery room the bleeding per vagina continued. In the early afternoon the patient was brought to the operating room for the third time and the packing removed. The bleeding did not appear to be quite as extensive. Twelve yards of packing was re-inserted. During this time continuous intravenous therapy to combat blood loss and shock was given.

During the first 24 hours the patient received 8 bottles of blood, 3 bottles plasma, 1 bottle of subtosan, 1000 cc 5% glucose in water and noradrenalin, pitocin, Vitamin K, ergometrine and calcium gluconate.

Fibrinogen levels were obtained and 1 gram Fibrinogen was administered in the first 24 hours. Fibrinogen levels on January 14th, 1955 were 9.19 gm % and 0.13 gm %. (Normal 0.30 - 9.50 gms %)

The blood picture on the first day showed marked polymorph leucocytosis and moderate thrombocytopenia.

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**Department of Medicine, Dalhousie University, Victoria General Hospital, Halifax, N. S.

The bleeding per vagina subsided, the patient's blood pressure remained at 55/40 the pulse 120 per minute. The urine output during the next 24 hours was 87 cc.

This case was seen by the Department of Medicine following the third operation and for the next three days the patient remained in the recovery room. On the second day the blood pressure rose slightly and by the third day it was 100/60, the average daily urine 200 cc.

A diagnosis of acute renal failure due to vaginal haemorrhage (abortion) associated with hypofibrinogenaemia (toxaemia?) thrombocytopaenia (drug?) and possible haemorrhage into the adrenal cortex, was made.

Acute Renal Failure.

Acute renal failure is manifested clinically by:

1. transient reversible impairment of short duration, or
2. prolonged failure with tubular necrosis of a long duration, or
3. terminal stages of intrinsic renal disease with a chronic duration.

Such terms as "Hemoglobin Nephrosis, Cushing's Syndrome, Lower Nephron Nephrosis, Acute Anuria (complete anuria is seldom seen)" are not generally used at the present time. The term Acute Renal Failure appears from the present day literature to be the one of choice.

The Course: (This is very important). The course is characteristic in that:

1. The symptoms and signs of the etiology are present in the initial period.
2. During the period of "anuria" oliguria is more common. This is important to remember because the administration of fluids at this time must be slow and of small volume.
3. The period of diuresis initiates the first stage of recovery and here of course, the management is to increase the volume intake, but one has also to consider the prevention of the so-called low salt syndrome (excess loss of sodium chloride with polyuria).
4. Period of convalescence during which time complete recovery takes place in most instances and during this period nutrition is of the most importance, as well as the use of antibiotics to prevent infection.

Success in treatment depends to a great extent upon the observation of the clinical course and the etiology.

Etiology of Acute Renal Failure.

First we have to consider the nephrotoxins - poisons such as the heavy metals e.g. (Mercury etc.), organic synthetic compounds e.g. (carbontetrachloride, diethyl glycol and the sulfa compounds), inorganic non metallic poisons e.g. (potassium chlorate) and natural drugs and organic compounds e.g. (mushrooms).

These poisons will produce characteristic symptoms and signs. In addition there may be evidence of circulatory collapse, nausea and vomiting which of course aggravates renal failure. For some of these poisons there are of course specific antidotes.

The next etiological factor which must be considered is *circulatory failure*. Circulatory failure may be due to:

- (1) Haemorrhage due to trauma, surgical procedures or obstetrical complications.
- (2) Haemolysis - incompatible blood transfusion, use of hypotonic fluid and cold agglutinins. ✓
- (3) Plasma volume loss - burns and crushing injuries.
- (4) Extracellular Volume Deficit - Etiology is that of electrolytic loss through e.g.
 - (a) gastro-intestinal tract - vomiting and diarrhoea. ✓
 - (b) segregated fluid accumulation. ✓
 - (c) urinary losses. ✓
- (5) Vascular injury produced by:
 - (a) infection, acute nephritis. ✓
 - (b) malignant hypertension. ✓
 - (c) toxaemia of pregnancy and eclampsia. ✓
- (6) Anoxia
 - (a) carbon monoxide poisoning - anaemia. ✓
 - (b) cardiac decompensation. ✓
 - (c) heat stroke. ✓
 - (d) electric shock. ✓
 - (e) infection - septicaemia, sub acute bacterial endocarditis, meningococcal septicaemia with acute adreno cortical insufficiency (Waterhouse-Friderichsen Syndrome). ✓

In the management of acute renal failure one has to consider some of the important pathological findings.

Nephrotoxins: Poisons produce lesions in the proximal convolutions of the renal tubules either by contact through their presence in the glomerular filtrate or by absorption from the blood; there is no doubt an associate renal ischaemia. However, the glomeruli are seldom involved.

Ischaemia: When there is marked renal ischaemia the lesions are disturbed at random from the proximal convoluted tubules to the collecting tubules. There is varying degree of degeneration of the tubular epithelium (as in poison). There is also disruption of the basement membrane. The glomeruli are not particularly involved. There is invariably oedema of the interstitial tissue. The lumen of the tubule becomes continuous with the interstitial tissue and glomerular filtrate can easily escape into the blood stream.

The disturbed physiology seen in these cases are:

1. Plasma flow.
2. The composition of blood and tissue fluid.
3. With increased cellular breakdown there is a rise in the serum N.P.N. which in turn is still further increased with the presence of oliguria.
4. There is increased serum potassium which is due to diminished urinary excretion and excess cellular breakdown.
5. There may be disturbance of the cardiovascular system.
6. The local disturbance is also important to remember because with the functional local deficiencies of the regenerated renal

tubules there may be a marked diuresis with excess loss of water or excess loss of salt, particularly sodium chloride. If this is too great, then, of course, oliguria results.

Regeneration of Damaged Nephrons.

1. There is usually excellent regeneration, *but*
2. The basement membrane must be intact in order to have regeneration of the renal tubular cells.
3. Some areas may have loss of the basement membrane and this may account for persistent albuminuria in some patients. In fatal cases there is marked loss of the basement membrane.

There are certain important clinical features in acute renal failure which are essential to remember.

1. Symptoms and signs of the etiological factors are usually characteristic. However, it should be recalled that, for example, carbon tetrachloride is a nephrotoxic and hepatotoxic agent (N.B. Prothrombin time).
2. The early symptoms of acute renal failure may be overshadowed by those of the etiology. Some of the early symptoms and signs are:
 - (a) the color of the urine changes,
 - (b) there is nausea and vomiting, with or without shock and thirst, the latter is seen particularly in carbontetrachloride and pre eclampsia,
 - (c) the specific gravity of the urine falls and the blood pressure is normal or low.

It should also be remembered that if excess water is given to these patients, hypernatraemia will occur. Likewise excess intake of water and sodium will produce hypernatraemia. In such patients there is usually oedema, lachrymation, increased salivation, nausea, apathy.

The Period of Oliguria.

In general this period has a slow onset with a gradual increase in the blood N.P.N. There is not as rapid an increase in the N.P.N. as is seen in the acute obstruction of the genito urinary tract. However, in severe trauma the N.P.N. may rise very rapidly. The N.P.N. may become elevated from 100-300 mgms%, but as a rule the elevated N.P.N. does not produce many symptoms. The phase of oliguria may last from one to thirty days. One may observe during this period evidence of hypopotassaemia characterized by weakness, ileus, nausea, vomiting, gasping respirations, cyanosis and electrocardiographic changes; or there may be evidence of hyperpotassaemia with flaccidity of the muscles, myaesthesia, listlessness, mental confusion and electrocardiographic changes.

Period of Diuresis.

In general, this period may last from 3 to 10 days or longer. The patient improves clinically although some of the symptoms, particularly vomiting, mental confusion, abdominal cramps and increased azotemia may be disturbing, but as a rule the azotemia gradually decreases.

The complications which may occur during acute renal failure are:

Cardiovascular or cerebral, pulmonary oedema, severe anaemia and the salt wasting syndrome.

The management of acute renal failure: The management of the etiology is of utmost importance in order to prevent tubular anoxia.

1. One should use the specific antidote if such is available or indicated.
2. Whole blood if required.
3. Plasma if required.
4. Plasma expanders if required.
5. Water and electrolytes in volume and concentration as required by the patient.
6. Control of infection by specific antibiotics.
7. Caloric requirement.
8. Other supportive or specific management which may be indicated for the individual case.

While the patient is in the oliguric phase the intake of water is most important. The volume should be equivalent to the basal requirement plus the urinary output.

When diuresis occurs, the patient is given sufficient amount of water, salt and food.

During the convalescent stage, which last for 10 to 20 days, the only renal function test of value is the concentration kidney test. (Specific Gravity of urine).

Artificial measures such as sympathectomy, renal decapsulation are not practiced any more. Exchange transfusions are practiced by some, particularly in France. Irrigation of the bowels using sodium sulphate, artificial kidney and peritoneal lavage no doubt have a place in some cases.

The management of the case presented this morning was based primarily upon the etiological factors.

1. General management of shock.
2. Hypertensive drugs.
3. Bleeding was controlled by blood and plasma transfusion and fibrinogen.
4. Plasma expanders.
5. A.C.E., Cortisone and Oxygen.
6. The patient was kept in "tight" electrolytic balance, the amounts given were based on the clinical picture, the laboratory findings of blood and urine, in addition to antibiotics.

Some of the laboratory findings in this case are recorded in Table I.

In a hospital where laboratory facilities are not available a similar procedure to that used in the Korean Campaign is acceptable.

A. Treatment of shock (including the etiology).

- B. 1. Calcium gluconate 10%
100cc. }
2. Sodium Bicarbonate 7.5% } 25 cc/hr intravenously
50 cc amp. }
3. Dextrose 25% }
400 cc }
4. 40 units crystalline insulin }

PLUS

5. Isotonic Sodium Chloride
or 1/6 M. Lactate intravenously } = urine volume
6. Antibiotics. The dosage is decreased during the period of oliguria.
7. Full Diet
Vitamins } During the period of diuresis and convalescence.
Testosterone }
8. Re Anaemia: If the P.C.V. falls to 30% infusion of freshly washed
R.B.C., and B₁₂ is the treatment of choice.

Recently a simple inexpensive apparatus has been devised (Fig. 1) whereby solutions can be administered slowly at a fairly constant rate intravenously, or nutrients enterally.² One is able by such a procedure to keep the patient in a "tight balance" which is so essential in cases of acute renal failure.

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Re Fig. 1 - Diagram and description as in C.M.A.J., Vol. 73, Nov. 15/55. Murphy and Tonning. An apparatus for enteral feeding or intravenous therapy.

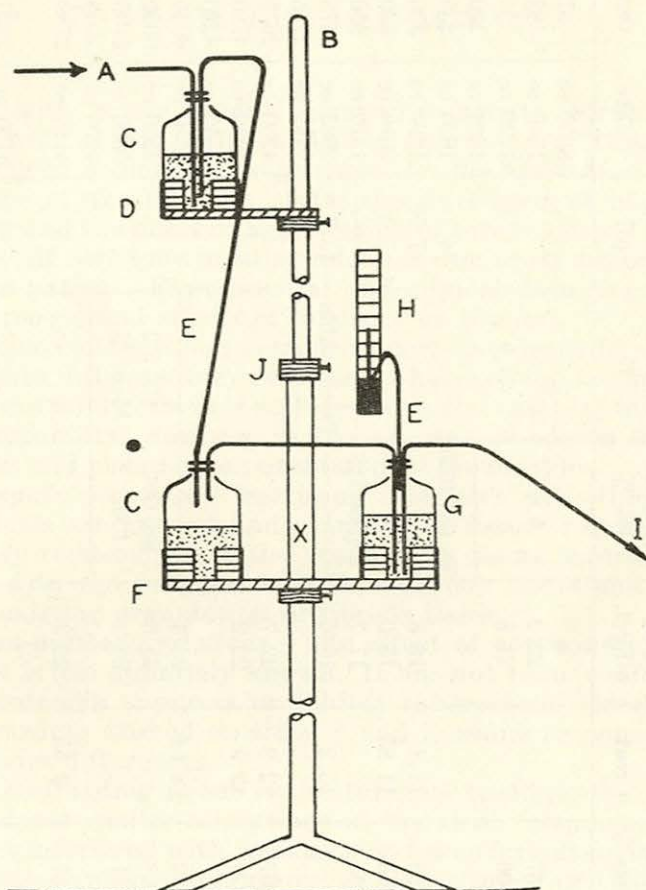


Fig. 2.—An apparatus for enteral feeding or intravenous therapy.

(A) Air inlet. (B) Adjustable stand. (C) 500 c.c. or 1,000 c.c. glass bottles for H_2O . (D) Single movable platform. (E) Polyethylene tubing. (F) Double movable platform. (G) 500 c.c. (or small plastic) bottle for food or intravenous solution. (H) Manometer, to be clamped on stand at X. (I) Gastric tube (to stomach) or intravenous tube with needle (to vein). (J) Adjustment for stand.

Method of operation.—(1) Fill bottle C (top) with 1,000 c.c. or 500 c.c. water, as required. (2) Attach bottle G (tube feeding or intravenous solution) to the system. (3) Adjust the manometer to proper reading. (4) Inject 10-20 c.c. air into air inlet (A), to initiate the flow of H_2O from C (top) to C (bottom). (5) The rate of flow is governed by the distance between bottles C and the distance between F and the outlet of the gastric tube or intravenous needle. (6) If the manometer reading continues to rise, it is indicative of occlusion of the gastric or intravenous tube or of increased gastric pressure. On the other hand, if the reading continues to fall, there is difficulty in the proximal section of the apparatus, i.e., before reaching bottle G. (7) When bottle (C top) is nearly empty, exchange it with the lower bottle (C). (8) A screw clamp can be used on tube (E) for better control of flow. (9) Manometer (H) is not a necessity.

TABLE I

SERUM mEg/L	Na	K	Cl	NPN Mgms %	Creat.	CO ₂ mEg/L	Proteins GR. %	Ic. Index U	Blood pH	Intake	Output
Jan. 14										8500 cc	87 cc
Jan. 15	127.5	5.7	87.4	57		22.2	5.6			1540 cc	182 cc
„ 16	120.	4.8	74.5	106		21.8		38.9		1790 cc	225 cc
„ 17	121.6	4.56	75.3							1860 cc	200 cc
„ 18	122.5	4.64	71.9				Sp. Gr. 1007		74.1	1620 cc	235 cc
„ 19	127.3	5.3	75.3	205	11.1	16.8			7.56	1980 cc	330 cc
„ 20	125.7	6.10	72.8	246	11.85	15.0			7.5	2010 cc	320 cc
„ 21	122.5	6.98	74.5	255		17.7	Hb. 66.7%			1470 cc	950 cc
„ 22	126.6	6.56	74.5		13.2	16.6		Prothrombin	13.5	2985 cc	1375 cc
„ 23										2485 cc	2775 cc
„ 24	128.8	5.77	72.8	287	12.9	22.7				4230 cc	2675 cc
„ 25	136.8	5.55	83.0	279	12.9	22.2				6550 cc	4780 cc
„ 26										6650 cc	8250 cc
„ 27	148.1	4.42	95	222	8.64	25.4				6580 cc	6930 cc
„ 28	146.6	4.02	86.5	168		35.8	Sp. Gr.	Ca. 5.2		4240 cc	6050 cc
„ 29	146.3	3.53	89.9	111		29	1007	Mgm %		5020 cc	3100 cc
„ 30										4170 cc	3500 cc
„ 31	142.6	2.98	98.4	57	2.55	26.3				4110 cc	2780 cc
Feb. 1										4150 cc	2520 cc
Feb. 2										3480 cc	2420 cc

Cortisone and Tuberculosis*

R. L. Aikens, M.D.**

IN common with many useful therapeutic agents, cortisone may produce adverse as well as good effects. The undesirable results associated with the use of this drug in ordinary dosage include: the activation of a peptic ulcer, the appearance of the diabetic state, the development of edema, defective wound healing and the onset or aggravation of tuberculosis.

The effect of cortisone in tuberculosis is due to its action on the tissue responses of the patient. Experimental and clinical data has now accumulated to indicate three general effects of cortisone on tissues:

1. *The acute inflammatory response* – cortisone leads to a marked suppression of the acute inflammatory response, whatever the noxious agent may be. At the site of the injury, there is an increase in the vascular tone, decrease in the capillary permeability, decrease in the amount of edema fluid and decrease in the numbers and phagocytic potential of the leucocytes.

2. *The repair processes* – cortisone interferes with the repair processes. Fewer fibroblasts are present and granulation tissue is quantitatively as well as qualitatively reduced. Once the granulation tissue is formed, cortisone will not interfere with the progress into firm fibrous tissue and there is no lytic effect on pre-existing granulation or fibrous tissue.¹

3. *Antigen-antibody relations* – the effect of cortisone upon antigen-antibody relations is less definitely known. It has not been confirmed that cortisone or corticotropin suppress or inhibit tuberculosis sensitivity. Variations in reports regarding altered sensitivity and immune responses may be associated with species differences.

When the offending agent is the tubercle bacillus, the administration of cortisone produces similar alterations in the tissue responses. The inflammatory reaction is interfered with, granulation tissue formation is hindered and the disease progresses unless the hormone is discontinued or tuberculostatic drugs are given. By the same token, symptoms dependant upon the normal responses are absent and symptomatic remission occurs for a time. The effect of ACTH or corticotropin appears to be much less pronounced than that of cortisone.

In January, 1951, the Bulletin of the National Tuberculosis Association (of the United States) published a warning issued by the Committee on Medical Research of the American Trudeau Society . . . "Because the action of ACTH and cortisone upon factors of resistance to tuberculosis has been shown to be deleterious in at least three species of experimental animals (mice, guinea pigs and rabbits), and there is strongly suggestive evidence along the same lines in human beings, it is recommended that these substances not be used in patients with active tuberculosis, and that they be used with extreme caution even in human beings with possibly latent tuberculosis infection, until such time as further investigative work has shown that such administration may be safe. The routine diagnostic examination for tuberculosis of patients under

* Adapted from presentation to Halifax Medical Society—12 Oct., 1955.

** Attending Physician Halifax Tb. Hospital.

physicians' care is especially necessary for patients who are being considered for ACTH or cortisone therapy."

Since these and other words² of caution have been given, a period of over four years of clinical experience with cortisone has thrown considerable light on the problem. By and large, considering the vast numbers of patients who have received it for a host of conditions, there seem to have been comparatively few whose treatment has been complicated by the development of tuberculosis. Nevertheless, there have been a number of case reports published,^{3 4 5 6 7} undoubtedly a number of cases unreported and probably others which have been unrecognized. It may therefore be stated that an unsuspected tuberculous focus may be brought to activity by the use of cortisone in usual therapeutic doses.

It has also been learned that, although active tuberculosis may be aggravated by cortisone and corticotropin, this effect may be overcome by the concomitant use of anti-microbial or tuberculostatic drugs. This has been demonstrated particularly in the case of tuberculous meningitis by Shane and Riley,⁸ using cortisone, and by Bulkeley,⁹ using corticotropin. These investigators have gone a step farther than showing that the combination may be used safely, and have attempted to turn a potentially adverse effect into a useful one. They have used the hormonal suppressive tissue action to try to prevent the accumulation and organization of the thick basilar exudate, with its serious complication of hydrocephalus.

Further evidence is available that cortisone in replacement or physiologic dosage, as in the treatment of Addison's Disease, may be administered safely in inactive tuberculosis. Browne et al¹⁰ have shown that when the active tuberculous disease (if present) is controlled by antimicrobial drugs in a patient with Addison's Disease, cortisone in doses from 12½ to 37½ mgm. daily may be given without further antimicrobial drugs without evidence of activation of tuberculous disease. It will be emphasized, of course, that regular careful follow-up examinations of such patients with regard to tuberculosis must be carried out.

With reference to cortisone, then, and to a lesser extent with corticotropin, we may note these effects concerning tuberculosis:

1. *In active tuberculosis.* Administration of the drug in usual therapeutic doses will initially lessen the symptoms but the disease will eventually progress.¹¹

2. *In active tuberculosis.* The adverse effects of the drug in usual therapeutic doses may be overcome by the concomitant use of anti-microbial drugs.

3. *In inactive tuberculosis.* Administration of the drug in usual therapeutic doses may lead to the activation of an unsuspected or apparently inactive tuberculosis, (as in the use of the drug in treating rheumatoid arthritis, bronchial asthma, etc.)

4. *In inactive tuberculosis.* Administration of the drug in physiologic or replacement doses may be carried out with little risk of activating the tuberculosis, (as in the use of the drug in treating Addison's Disease).

Case Reports

1. B.L., male, age 24 years. He became ill in February, 1955, with an upper respiratory infection and painful joints. On admission to hospital, a diagnosis of acute rheumatic fever was made and cortisone therapy begun. A chest X-ray of about a year previous to admission and the hospital admission film were negative. After an initial improvement, the patient's condition worsened. The chest X-ray was repeated after about 4-5 weeks of treatment (cortisone dosage about 1.5 gm.). It showed a diffuse bilateral infiltration suggesting miliary tuberculosis. Cortisone was discontinued and antimicrobial drugs begun. Improvement was satisfactory and after 3-4 months treatment, the X-ray had cleared completely. It must be noted that tubercle bacilli were never grown in this case despite frequent gastric washings cultures. With a positive tuberculin reaction, however, and the X-ray appearance and response to therapy, it is felt that an etiologic diagnosis of tuberculosis is a logical assumption.

2. L. LeB., female, age 37 years. From 1938 to 1942, this patient suffered from tuberculosis of the right knee, surgery with ankylosis being carried out in 1939. The chest X-ray always showed a small lesion in the left first interspace. She felt reasonably well until 1949, when she became very fatigued, developed many freckles on her face and noted general darkening of the skin. Although the diagnosis was made in 1951 of Addison's Disease, she received little treatment until 1955. In February, 1955, she was admitted to hospital in Addisonian crisis. Recovery was rapid with usual therapy. After the first two days, she was maintained on 25-37½ mgm. of cortisone daily. The chest X-ray of February was similar to preceding ones. In May, there was noted on the roentgenogram a new area of infiltration in the left second interspace. Three weeks later, it had not changed and its appearance was of tuberculosis. Tubercle bacilli were not grown from gastric washings but the lesion cleared after 2-3 months antimicrobial therapy and may be considered as tuberculosis although not bacteriologically proven.

3. A. MacL., male, age 56 years. This man had been ill for about six weeks prior to admission to hospital on March 28, 1955. There was high fever, weight loss, moderate hepatosplenomegaly and a fading skin rash. The diagnosis could not be clearly established and he was so critically ill that it was felt cortisone must be tried as a life-saving measure. He had received about 1200 mgm. over about a four day period when lymph node swelling developed. In addition, the chest X-ray, which on admission showed an appearance of old tuberculosis, worsened so that there was a bilateral pleurisy as well as parenchymal extension. Lymph node biopsy showed tuberculosis and a gastric washing culture was later reported positive for tubercle bacilli. When the biopsy report was received, antimicrobial drug therapy was begun and the cortisone discontinued over a period of several days. The total cortisone dosage was about 2 gm. Improvement on tuberculosis treatment regime has been satisfactory. This appears to have been a miliary tuberculosis temporarily aggravated by cortisone until antimicrobial therapy was begun.

4. L. H., male, age 42 years. A chest X-ray in 1943 was reported as normal. In July, 1953, he began treatment with cortisone because of rheumatoid

arthritis. On a maintenance dose of 50 mgm. daily he took about 12-15 gm. of the drug over a 10 month period. At that time a routine 4 by 5 X-ray showed a lung shadow and it was confirmed by further X-rays and sputum cultures to be active tuberculosis. Usual treatment has been very successful. It can not be absolutely determined that the active tuberculosis did not precede the cortisone administration, but it is just as probable that the cortisone was a factor in the development of the tuberculosis.

5. R.D., male, age 44 years. This man had had tuberculous pleurisy with effusion and nephrectomy for a tuberculous kidney while in the army in 1939-45 war. In January, 1953, he came to hospital with arthritis of knee, shoulder and left wrist. The condition appeared to be rheumatoid arthritis and physiotherapy was used. In May, the wrist was painful and swollen and hydrocortisone was injected into the joint. In October he was re-admitted with a draining sinus from the wrist and culture showed tubercle bacilli. X-ray showed a tuberculous joint. The wrist had not been X-rayed previously but the knee had been and shown no sign of tuberculosis. No other joint flared up except the wrist after the injection. It seems probable that the hydrocortisone activated a latent tuberculosis focus in the wrist joint or else aggravated a tuberculous arthritis.

6. A.S., male, age 58 years. This man had suffered from rheumatoid arthritis for at least four years and joint pains for many years prior to this. Cortisone did not appear to be appropriate treatment and he was refused it at two hospitals despite his repeated requests. He obtained it himself, however, and took at least 1-2 gm. over a period of several months. He felt better but developed swelling of the right elbow and a sore left shoulder. X-rays of these joints suggested tuberculosis and biopsy of elbow showed a tuberculous synovitis. He improved satisfactorily with tuberculostatic drugs.

SUMMARY

1. The relationship between cortisone therapy and tuberculosis has been discussed.
2. The discussion falls rather broadly into two parts:
 - (a) The danger of activating unsuspected tuberculosis while using the drug for some other condition. Several case reports have been given.
 - (b) The considered use of cortisone in active tuberculosis with an adequate covering "umbrella" of tuberculostatic drugs. We have only three such cases and have not included them in the case reports. In none was the tuberculosis aggravated but one case developed a secondary pyogenic meningitis which proved fatal.

CONCLUSIONS

1. If cortisone is to be given to a person with active tuberculosis for any purpose, adequate antimicrobial therapy must be given as well.
2. When cortisone is used in therapeutic doses for any period of time in the treatment of non-tuberculous disease, the possibility of bringing to light an unsuspected or presumed inactive tuberculosis must be remembered. This implies routine chest X-ray and clinical examination in search for any form of tuberculosis at the beginning of therapy and at regular intervals thereafter.

3. In the case of inactive tuberculosis, cortisone in replacement doses may apparently be used without much danger. However, as in Case No. 2 above, even with such doses, the chance of activation remains, and the patient's course must be followed with great care.

Acknowledgement is made to clinicians who have provided case material and to Dr. C. J. W. Beckwith, Superintendent of the Halifax Tuberculosis Hospital and Dr. T. E. Kirk, Superintendent of Camp Hill Hospital for permission to publish case reports.

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What the Department of Public Welfare has to Offer the Needy of Nova Scotia *

Miss Beatrice Crosby, Assistant Director of Mothers' Allowances.

Department of Public Health, Halifax

I have always felt that the best way to begin a paper is with a definition. This usually makes a good impression, and at least in the beginning, sounds as though the writer is thoroughly familiar with the subject.

In describing the purposes and functions of our Welfare Department then let me define "Welfare". Mr. Webster says that it is "a state or condition of well being, good fortune, happiness or prosperity." At first glance it would seem that we may be using the word a little loosely. However, our first purpose is to improve the general state or condition of those who, for one reason or another come to us for assistance. We try to do this by helping the individual to help himself.

Our Social Legislation dates back to England and the year 1601. In that year Queen Elizabeth I passed her 49th Act that has become known as the Elizabethan Poor Law. Here for the first time it was publicly recognized that a certain group in the population needed assistance and that the state had some responsibility in providing for their needs.

Until this time the poor had been helped by Religious orders in the Monasteries and certain members of the nobility who felt some personal responsibility for helping their fellow men. When Henry VIII closed the Monasteries the situation became urgent and Queen Elizabeth recognized the necessity for setting up some form of social legislation.

The first law provided for the care of three groups of needy, the old, the ill and children. These three groups were to be cared for in three separate buildings and were to be kept apart from one another. Institutional care was the only known type of assistance up to that time.

Because of financial strain however, the separate institutions were not built, the old people, mentally defectives and children were all placed in one dwelling known as the Alms House and a plan of separate care had to be worked out. The situation soon became impossible, and a plan of separate care had to be worked out.

Gradually a system of boarding home care was devised. Instead of sending children and old people to the Alms House, they were given to families and a fee for their maintenance was paid by the state. After many more years, some legislators realized that many of the needy could stay in their own homes if they only had money, so a system of out door relief was established. A principle that persons should not be moved from their own homes merely for financial need came to be recognized and fewer people were sent to institutions - only those who could not possibly remain home.

In the past two hundred years more and more attention has been given to the needy in their own homes whenever possible and the trend has been to eliminate institutions except for the comparatively few people who will always need that particular type of care. At the present time we try to provide for the needy in their own homes and in a setting which resembles as closely as possible

* Paper presented at the Annual Meeting, Canadian Public Health Association, Atlantic Branch, Kentville, N. S. November 9th and 10th, 1955.

their normal environment. Institutional care is provided now by the Department for only two groups, mentally defectives and delinquents - all other assistance is provided in the individual separate environment.

Generally speaking the help we are now able to give is divided in two broad categories, financial assistance and case work services.

First, we have found that the greater number of our needy have problems that are entirely financial. They are normal, well adjusted individuals who need only the help of a regular income to solve their difficulties.

In our Mother's Allowance Programme for example, we are presently paying an allowance to 2500 families in the Province. In these family situations the father is either dead or is prevented from supporting his children by a total and permanent disability. We feel that about 90 per cent of these families are capable parents who are bringing up their children in a healthy, happy home atmosphere. All they require is a cheque each month. It is true that some of them need more than the \$80 maximum we are able to give. The fact remains, however, that money will solve their problems.

Secondly, other families need something more than money. Perhaps there is a marital difficulty, or lack of ability to give the children the understanding and care they need. Perhaps the father finds it hard to adjust to his illness and to accept the fact that his wife is getting public assistance. Perhaps a child is becoming a behaviour problem, or because of the insecure financial situation, wants to leave school, when it seems wiser to continue his education. Our workers, by case work services, counselling and sometimes referrals to other community resources are able to help with these problems.

The third group are those who may have no particular financial problems, but nevertheless need help and guidance. The unmarried mother asks for help in planning for her confinement and later, placement of her child. The parents of a mentally defective child want assistance in making suitable provision for his care, or his placement in a training school. The young couple wanting to adopt a child, come to us hoping that we will be able to find just the right baby for them.

These three groups we consider *needy*. The first needs only financial help, the second counselling and advice too, and the third have problems which fundamentally cannot be solved by money. Now let me tell you briefly how we try to help them.

We have five district offices situated throughout the Province at Halifax, Antigonish, Stellarton, Sydney and Digby, and the offices are all directed by a trained supervisor. Our Provincial administration office is located at Halifax. We have a Social Work staff of forty.

Some parts of the Province are not serviced by any other social agency. In these districts our department provides the only welfare service and acts as a Children's Aid Society.

Now let us look at the needy in age groups. As you know Old Age Security is paid to everyone over 70. This assistance is paid and administered by the Federal Government, but our Department does the Social Investigation for the Department of National Health and Welfare. If a recipient for Old Age Security has a social Problem which is brought to the attention of the Dominion Government, a member of our field staff is asked to visit the home. When the problem cannot be handled by him a referral is made to the proper Department.

Our Old Age Assistance program provides an allowance up to \$40 a month for certain needy individuals between the ages of 65 and 69. The assistance is granted on a means test, but a couple could receive an income of \$80 Old Age Assistance. If they have any other source of income Old Age Assistance will supplement it up to a maximum of \$1,200. Last month Old Age Assistance was paid 5,200 people in the Province.

Blind Persons' Allowances are payable to certain needy blind persons who are over the age of 18. Seven hundred blind persons receive this allowance. Disabled Persons' Allowances are granted on a means test to 1,050 totally and permanently disabled people over 18. These three programmes are operated in co-operation with the Federal Government. The Dominion pays a percentage of the allowance but the administration costs are borne by the Province.

A field staff of 15 handle the investigations for these three programmes.

Mothers' Allowances are paid to dependent children whose fathers are either dead or disabled. Last month, allowances of about \$127,000 were paid in the Province. Mothers' Allowances are granted on a budget basis and an allowance up to \$80 may be paid to a mother. Assistance may be paid until a child is 18 if the child is making satisfactory progress in High School.

Through an agreement with the Nova Scotia Medical Society we are able to provide a plan of limited medical care for our Mother's Allowance beneficiaries. Last year, almost \$80,000 was paid to Maritime Medical Care, who administers the Plan. The Plan seems to work well and we feel that the families are receiving a great deal of benefit from the service.

Last year, we paid Mother's Allowance to 1,984 mothers. It is interesting to note that of the 789 wives who received Mother's Allowance, 231 husbands were receiving treatment for tuberculosis. Of the 1,195 mothers who were widows only 102 husbands had died of tuberculosis. We think that these figures give some indication of the fact that through the co-operation of the Department of Public Health and our Department more fathers are able to take a longer period of convalescence while their families are being helped by Mother's Allowance.

The Probation Section of the Department gives service to both Juveniles and Adults.

The staff members work with Juveniles on probation and parole, assist in work placements, and provide special services for children in Reformatory institutions.

Adult probation workers provide social investigation for the courts and for Dorchester Penitentiary.

As part of this section the Department operates the Nova Scotia School for Boys at Shelburne. This Institution cares for 75 delinquent boys who have been committed there by the courts. Besides the regular school curriculum, courses in pottery and woodcraft are provided and some training is given in shoemaking and printing.

The Department also has a psychological service. This service is available to other sections of the Department, and accepts referral from parents, doctors, public health nurses, etc. Psychological tests are given and counselling service is available to parents. The second departmental institution, the Nova Scotia Training School, in Truro, is operated in connection with this service.

Here mentally defective children are cared for and a limited training plan is carried out.

Generally speaking the school accepts the trainable mentally defective child who will eventually be able to go back to the community. However, a few low grade mentally defective children are now being cared for at the school.

The Protection Workers in the Department investigate cases of actual and possible child neglect which come to their attention. If after a period of work with the family it seems evident that there is actually neglect and the possibility of improvement is remote court action is resorted to. Children removed from their parents and made wards of the Department remain under our care until they become 21 years old. They are placed in suitable homes and the necessary care and service is provided by us.

You will see that caring for a child until he is 21 involves a great deal of work and planning. Boarding homes must be secured, medical services provided and suitable education has to be planned for every child. Last year the Department had 585 wards; 381 of them were cared for in boarding homes. Of the remaining number, some were in adoption homes, some in free homes, institutions, universities, and 48 were self-supporting.

The children in boarding homes were visited on an average of five times during the year.

An unmarried mother referred to us gets help and guidance in making plans for her confinement. If she decides that she will not keep the child an adoption placement is arranged. Sometimes boarding care is provided if the mother feels that she may want to take the child at a later date. On occasion the child of an unmarried mother is made a ward. Last year 273 unmarried mothers were helped by the Department.

The Adoption Act provides that a waiting period of one year is necessary before an adoption can be finalized, and that at the time of the hearing a recommendation from the Director of Child Welfare must be submitted to the court.

This involves two visits to the adoption home by our worker, usually one immediately following the placement and the second just before the year's waiting period is up.

The adoption worker also makes social studies of the parents who apply to adopt children. If the applicants are considered to be good potential parents a child is placed in their home whenever possible.

The Public Charities fund is also administered by our Department. This sum of money is set aside by the legislature every year to provide for transients and for certain other needy persons who have no settlement in the Province. Hospital accounts, emergency relief orders and transportation costs are the three main expenditures made from this. Last year \$7,500 was spent on this programme.

That sums up briefly the types of service we give in providing for the needy throughout the Province.

In closing let me take this opportunity of thanking the Public Health Personnel throughout the Province who are of constant assistance to us in our work. Dr. Robertson is presently acting as our medical advisor. Without the co-operation of Dr. Hiltz, Dr. Shane, Dr. Robb, Dr. Beckwith and all the Medical Health Officers it would be almost impossible to administer our Mother's Allowance programme.

Distinguished Physicians Honored

AT the Annual Meeting of the Canadian Public Health Association, Atlantic Branch, held at the Cornwallis Inn in Kentville, Nova Scotia, on November 9th and 10th, four distinguished members of the medical profession were honored by being granted awards of Membership Emeritus in the Branch at the Annual Banquet. Those persons singled out for this distinction were: Dr. A. C. Jost, Hon. G. H. Murphy, M.D., Dr. R. A. MacLellan, and Dr. S. W. Williamson. Their citations which accompanied the awards are given below."

D. J. Hiltz proposed and read the Citations which follow:

Doctor Arthur Cranswick Jost, B.A. (Acadia) M.D.C.M. (McGill), was born at Guysborough on October 17, 1874, of pre-Loyalist and United Empire Loyalist descent. He graduated in Arts from Acadia University in 1893 and in Medicine from McGill University in 1897.

He engaged in general practice of medicine from 1897 to 1916 and was a part-time medical officer of health for the County of Antigonish from 1900 - 1916. He became Inspector of Health and a Divisional Medical Health Officer with the Provincial Department of Health of Nova Scotia from 1919 to 1922 and finally Provincial Health Officer from 1922 - 1928. He was also inspector of Humane and Penal Institutions. He was Deputy Registrar General of the Province from 1925 to 1928. At this time he and the late Miss Jane Mortimer obtained from New York a supply of Christmas seals and inaugurated the first Christmas seal sale in our province.

During the First World War he served as a Lieutenant, Captain and Major in which latter capacity he was the Officer Commanding the No. 6 Detachment, Corps of Guides. He became Medical Officer, 64th Battalion, Canadian Expeditionary Force and finally, with the rank of Lieut.-Colonel, he became Assistant Director of Medical Services, Military District No. 7.

On January 1, 1929, he accepted the position of Health Officer for the State of Delaware, retiring from this position in 1940. He holds the distinction of having been one of very few if not the only Canadian to have been a Senior Health Officer for a State of the U.S.A. and also for a Canadian Province.

Dr. Jost returned to Nova Scotia in 1943 and has been in retirement in Guysborough since that time.

In 1950 he published a book "Guysborough Sketches," which was very favourably received.

He is a past member of the Dominion Council of Health, Canadian Public Health Association, Canadian Medical Association, Delaware State Medical Society, American Medical Association, American Public Health Association, States and Territorial Health Officers Association, Canadian Authors Association and the Nova Scotia Historical Society.

It is a privilege for the Canadian Public Health Association, Atlantic Branch, to award to Doctor Jost, in absentia, as a physician, a scholar and a public spirited citizen this membership Emeritus in our Association.

Dr. Robert Augustus MacLellan, M.D., C.M., (Dalhousie), LL.D. (Dalhousie).

On January 29, 1882, at Goldboro, Guysborough County, Nova Scotia, there was born to James and Mary MacLellan of that place a male child to whom, (without the help of any gipsy, as in the case of the immortal Robert Burns) they decided to give the name of Robert.

In the case of Robert Burns, the gipsy gave vent to the following prophecy:

*"The gossip keekit in his loof,
Quo' she, wha lives will see the proof,
This waly boy will be na coof —,
I think we'll ca' him Robin."*

We are sure that the gipsy gossip would have read the same in our Robert's palm if she had been present.

In 1892, Robert MacLellan left school to work in a cannery for three months and until 1900 worked in canneries and gold mines in our Province. From 1900 to 1904 he attended Pictou Academy, part time, working at whatever offered during the summers.

From 1904 to 1908, he attended Halifax Medical College, graduating in the latter year with the degree M.D., C.M. From 1908 to 1913, he practiced medicine in Wedgeport, Yarmouth County, and then moved to Rawdon Gold Mines which has been his home ever since.

He has been coroner for Hants County from 1914 to the present time and was Medical Health Officer for East Hants from 1914 to 1920 and again 1929 to 1955. He was a School Commissioner for East Hants from 1917 to 1942, and then Chairman of the Municipal School Board to the present. He was President of the Children's Aid Society from 1935 to 1947, and has been Honorary President since that time.

From 1945 to 1949 Doctor MacLellan represented East Hants in our Provincial Legislature.

In 1953, he was honoured by Dalhousie University by the awarding of an Honourary LL.D. In that year, too, he was appointed a member of the Old Age Assistance Board of Nova Scotia and he was made a life member of the Canadian Medical Association.

Of great interest and pride to us is the fact, also, that he was President of the Nova Scotia Health Officer's Association for 1939. That association is the precursor of our present Atlantic Branch of the Canadian Public Health Association.

Doctor MacLellan says this of himself:

*"Of the seeming gold which is only gilt
There's nobody knows but me;
Nobody knows; oh, nobody knows
For life is the veriest sham
And there's only a thousand or two, save me
Who can guess what a faker I am."*

Doctor MacLellan was ever modest and self-effacing. When asked to give a thirty minute presidential address to the Health Officers Association in 1939, he made the following opening remarks, "The scriptures record the story of a woman who found a man who told her 'all the things that ever she did' and I

felt certain I had at least found a man who had given me ample time in which to tell all that ever I knew on the subject of Public Health."

Such modesty becomes a man of such great energy, great talent and greatness of heart who has given so much of himself to his native Province.

It is with pride that we award to Dr. Robert Augustus MacLellan a membership emeritus in our Association.

Doctor George H. Murphy, B.A., M.D., F.R.C.S. (C), F.A.C.S., LL.D. (St. F.X., St. Mary's and Dalhousie) was born in Antigonish in 1875. He graduated in Arts from St. Francis Xavier after which he taught school at River Bourgeois, Cape Breton. He took his medical course at the Halifax Medical College, graduating in 1902.

Following graduation, he took up Medical Practice in Dominion, Cape Breton. In 1906 to 1907, he undertook postgraduate studies in London, England, and in 1914 he moved to Halifax where he was attached to the surgical department of the Victoria General Hospital and also of Dalhousie Medical School.

He is remembered by many of his old students as a great teacher and one who has the happy faculty of getting down to basic clinical fundamentals and quickly discarding all irrelevant matter. His greatest love was his Introduction to Clinical Surgery given to the students of the Second Year. His little book "Medicine as a Profession" grew out of his teaching years.

He was the first Minister of Health for the Province of Nova Scotia, appointed in 1930, and during his regime initiated a program for the control of tuberculosis which formed a good foundation upon which to build.

He has been director and medical referee of the Maritime Life Assurance Company from its inception until the present time. He is a lover of the humanities and is known as a student of Shakespeare. His book "Shakespeare and the Ordinary Man" was enjoyed by many.

He is a Fellow of the Royal College of Surgeons of Canada, Fellow and one time Regent of the American College of Surgeons, Honourary Doctor of Laws from St. Francis Xavier University, St. Mary's University and Dalhousie University and author of many scientific and literary compositions.

As a token of affection and esteem, Dr. Murphy was made an Honourary Life Member of the Halifax Medical Society at its annual meeting on April 30, 1952, commemorating completion of 50 years in active practice.

Dr. Murphy is presented to you as a skilled surgeon, as a competent and devoted teacher, as a lover of the classics and as a public spirited citizen.

It is a pleasure, Sir, to present to you this certificate of Membership Emeritus in the Canadian Public Health Association, Atlantic Branch.

Dr. Samuel W. Williamson was born on January 13, 1869, at Loganville, Pictou County. He was a student at Pictou Academy when the late John Stewart, a student of Lord Lister, came to Pictou to practice.

In 1896 Dr. Williamson graduated from Halifax Medical College and the following year was Senior House Surgeon at the Victoria General Hospital in that city. He then went to Hebron, Yarmouth County, where he practiced two years prior to moving to Yarmouth town where he has practiced internal medicine ever since.

During the First World War, Doctor Williamson was Medical Examiner for the Recruiting Centre in Yarmouth and also acted as Medical Officer at the Artillery Training Centre there.

He has been chief of the Medical Staff of the Yarmouth Hospital for a number of years. He is a past president of the Western Counties Medical Society and is an Honourary Life Member of the Canadian Medical Association.

Dr. Williamson is the oldest practicing physician in Nova Scotia, at the age of 86. In 1951, he boasted modestly that two years previously he worked 16 hours per day, but then reduced this slightly. He has never failed to make available to the people of his province, both his time and his talents. For many years he has served his community as Medical Officer of Health and thereby made a valuable contribution to Public Health in Western Nova Scotia.

We take pride in awarding to Dr. Williamson this Membership Emeritus in our Association.

Society Meetings

THE NOVA SCOTIA ASSOCIATION OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

The Annual Meeting of The Nova Scotia Association of Ophthalmology and Otolaryngology was held in November at the Victoria General Hospital, Halifax in conjunction with the session of the New Brunswick Society of Eye, Ear, Nose and Throat Specialists.

The morning session was devoted to clinical presentations and a business meeting, and following luncheon papers and films were presented.

The following officers were elected—

President—Doctor L. G. Holland, Halifax.

Vice-President – Doctor H. R. McKean, Truro.

Secretary-Treasurer – Doctor C. F. Keays, Halifax.

Executive – Doctors H. J. Davidson, North Sydney, D. K. Murray and D. M. MacRae of Halifax, L. F. Doiron, Digby and J. F. Cormier, Sydney.

Maritime Medical Care Incorporated

It is my privilege to-day to present to you, on behalf of the Board of Directors of Maritime Medical Care, an Interim Report of our activities for the past seven months. We are pleased to relate that enrolment of new groups increased considerably during the period. Enrolment in our Individual Plan remains slow although the medical costs of this plan are very good and have shown a small profit each month. We regret to say that the same does not apply to our comprehensive Group Plan. Costs for the first six months were very high and while we did not lose money, we are disappointed that the accrued surplus to date for the year is only \$15,000.

In an endeavour to find the reason for our high costs, a detailed analysis of all physicians accounts for the years 1953-1954 was made, and it was found that certain doctors accounts for home and office care were very high in comparison to the majority. A further study of these doctors accounts showed that many of the calls were made on the same families month after month for chronic and minor conditions which did not require therapy or at least much less than was being rendered. Taxing the accounts did not appear to be the answer because even with taxing, the accounts were still out of line. Admittedly, some of the blame for this abuse of available services can be laid at the door of the subscriber but, on the other hand, it is the responsibility of the doctor to protect his plan from those who, unwittingly or otherwise, are victimizing it.

It was decided to take some positive action to correct the situation. The doctors concerned were each written a personal letter informing them of the situation (some of them had been written previously in this regard) and they were informed that their accounts were too high and that their type of practice was not conducive to a prepaid medical plan. We asked them to co-operate with us to correct the situation, but that after three months, if an improvement was not noted, their Participating Physician's Agreement would be cancelled. The three month period is just up so we cannot say, at the moment, what action we will be required to take.

It has also been found, in the aforementioned analysis, that most of our Participating Specialist Physicians, of which there were 181 in our plan, also function either by choice or necessity as General Practitioners. In many cases, the bulk of their work is general practice and it is an accepted fact that eighty-five per cent of medical services may be rendered by a competent General Practitioner. We have thus been placed in the position of paying specialist rates for many services which actually do not require the service of a specialist physician. This has been a contributory factor in our continued high cost of office care.

To correct this problem we have studied the Participating Physician's Agreement and Subscriber's Agreement to see if we have been interpreting our agreements correctly and whether or not changes should be made in the existing agreements. It has been the decision of your Board of Directors to recommend to you the following changes in our Participating Physician's Agreement and Subscriber's Agreement. Copies of these changes are available for your perusal.

Proposed Changes in Participating Physician's Agreement

(1) That the term "Participating Specialist Physician" shall mean a physician who is certified by The Royal College of Physicians and Surgeons of Canada and who has signed a Participating Physician's Agreement with the Corporation, confining himself exclusively to the practice of the specialty in which he is certified.

(2) The specialist fee for a formal consultation shall be paid only to those who qualify as specialists under paragraph (1). The basis of compensation for office calls for physicians who are certified in a specialty, but who do not confine themselves exclusively to their specialty will be the Schedule of Fees of The Medical Society of Nova Scotia at the rates accorded to the General Practitioner.

Proposed Changes in Subscriber's Contract

IV. X-Rays.

(1) The X-ray services herein provided shall mean only the interpretation of the X-ray by a Physician and not for any other charges involved and may only be rendered by a Participating Physician. Should such services be rendered by the staff of any hospital, the Corporation shall be liable only for the physician's professional services and not for any hospital charges. In no case shall the Corporation be liable to pay a larger sum than what a Participating Physician would be entitled to receive for similar service.

V. Exceptions.

Available services to the Subscriber or his Dependents as set forth above shall not include:—

(1) The provision of hospitalization, dental services **including dental anaesthetics**, ambulance services, nursing services, drugs, vaccines, biological sera or extracts or their synthetic substitutes, eye glasses, special appliances, oxygen.

(3) Medical or surgical services when the subscriber or the dependent is a patient under the care of a special sanatorium or hospital for tuberculosis, mental illness or disease. Or, when the subscriber or dependent in question should properly be such a patient.

(9) Radiation and physical therapy and similar special treatment shall be limited to four such treatments per year.

(10) Periodic health examinations, medical examinations for health certificates for employment, visas, etc.

(11) Alcoholism or drug addiction.

VI. Waiting Periods

(b) Tonsillectomy or surgical procedures relative to hernia, **except congenital hernia where the dependent has been born under his parents Maritime Medical Care Incorporated contract**, or plastic surgery of the vagina and female perineum, including cauterization of the cervix or **dilatation and curettage** until the patient shall be enrolled for at least six consecutive months prior thereto.

XI. Term and Termination

(e) If a Subscriber leaves or ceases to be a member of the group, he may

apply to the Corporation for enrolment as a Pay-Direct Subscriber providing application is made within thirty days from when he left or ceased to be a member of the group. Such subscriber must also then make application for his or her spouse together with all unmarried dependent children and legal wards under the age of eighteen years. A Pay-Direct subscriber agrees to pay the approved rate quarterly in advance to the Corporation.

VI. Refractions

(c) Refractions, that is testing for eye glasses, until the patient shall be enrolled for at least one year prior thereto, and then shall be limited to one such examination every two years thereafter.

You have all received a copy of my letter of August 11th outlining the need of adequate housing for the offices of our Corporation but, in order to recall the details of this proposal, I will give you the pertinent facts again.

We now occupy two floors (the second and third) of a four storey building at 31 George Street, embracing a total of 3,000 square feet. Due to structural difficulties in the construction of this brick building, the arrangement of this office is bad and due to the fact that nearly all the partitions in the building are built with brick, it is impossible to re-arrange or re-design it.

With our continued growth during the past three years, the situation has deteriorated further until to-day, our staff are working under cramped and unsatisfactory conditions. Further expansion necessitates that we have additional office space and the only alternative at the moment is to lease additional space on the fourth floor of our present premises. Your Board of Directors have investigated the possibility of securing space elsewhere in the city but space in the quantity that we require is only available in three buildings and in each case the rent would be prohibitive. All three buildings rent at the rate of \$4.00 per square foot, and as we would require 4,000 square feet, this would cost us \$16,000 per year.

With these facts in hand, we have explored the possibility of erecting our own building. We have secured a hard and fast figure of \$179,000 from a contractor to erect us a suitable building. This was the lowest of five tenders received, the highest tender being \$11,000 above the aforementioned.

The figure mentioned above of \$179,000 does not include the cost of the site on which to erect the building and it is estimated that such a site would cost up to \$40,000, if the building were to be erected in a desirable business district. This, of course, is necessary if we are to receive a good rate of rent.

This proposed building would be constructed of brick and steel and would be three storeys high. It would be 100 feet in length and fifty feet in width and would render a total of 15,000 square feet. The top floor would be occupied by Maritime Medical Care and the two lower floors would be available for rental. The above estimate includes the complete building with elevator.

Maritime Medical Care has funds available to finance this project. The Corporation has, at present, \$193,000 in investments and a sizable bank balance to provide for the remainder. This money is not all surplus monies, but most of it is operating funds which have grown in size during the past four years.

Perhaps a word about our finances would be in order at this time. Subscriber premiums are all paid in advance. For example, the premiums for

August are paid at August first. The doctors accounts for August are not received until September and are paid in October so at all times we have two months' subscription fees on hand and rather than leave them lying dormant in the bank, they have been invested in sound securities and are earning a favourable rate of interest.

In investing these funds in the building we would simply be changing our investment from stocks and bonds to a real asset. The estimated yearly operating cost of such a building would be as follows:

Taxes.....	\$ 8,000
Janitor.....	2,400
Insurance.....	1,300
Heat and Light.....	5,000
Repairs.....	2,000
Depreciation.....	5,000
	\$23,700

The available space for rental would be approximately 11,000 square feet and at a rental of \$3.00 per square foot, which our real estate advisers tell us is a good figure for a new and modern office building, this would yield us an income of \$33,000 per year. You can readily see that the consummation of the proposed building would not only provide adequate housing for your Corporation, but would be an excellent investment as well. Along with being a good business proposition it is the opinion of the Board of Directors, that we have no alternative but to erect our own quarters and, of course, there are other advantages that will accrue with the ownership of our own building. Along with furnishing us with satisfactory housing, not the least of them would be excellent advertising the building itself would do. The financing of this building will not affect in any way our payments to physicians nor subscriber rates. It is simply re-investing the money we have currently invested.

At the moment, the Board of Directors are arranging to renew the lease on our present premises which expires January 1st, 1956, on a short-term basis, but with the understanding that we may sub-let if it is necessary and on securing your final approval for the erection of the building that a site be secured and construction undertaken.

This is an important step in the progress of your Corporation, and I ask the support of each of you in bringing this project to an early and satisfactory conclusion.

Respectfully submitted.

(Signed) A. G. MacLEOD,
President, Maritime Medical Care Incorporated.

Re—Misuse of Prescription Drugs—Schedule F Drugs Under the Food and Drugs Act

FROM time to time we read in newspapers and elsewhere reports concerning misuse of narcotics and other potent drugs in various parts of Canada. Happily, we do not have a narcotic problem in the Atlantic Provinces and most of us believe that potent drugs are very seldom misused here. While there is little evidence that we have a problem with respect to the use of narcotic drugs in the Atlantic Provinces, perhaps we should not be so complacent regarding certain prescription drugs — Schedule F drugs under the Food and Drugs Act. Occasionally the public have seen reports that young men in the Halifax Metropolitan area have had in their possession potent drugs, generally barbiturates, which they are misusing. There is considerable evidence that these youths are adding these drugs to soft drinks, such as coke, and also to alcoholic beverages. One would gather that there is a belief among the young people that the effect of the alcohol can be considerably increased by the addition of a barbiturate to it. That they may be using the barbiturates with other purposes in mind is also probable.

The R.C.M.P., who have investigated it outside the borders of Halifax, and the Halifax City Police, are all too aware of the problem. We, at the Regional Office of the Food and Drug Directorate of the Department of National Health and Welfare, have also been made aware of the problem since we have sometimes been called upon to identify the capsules found by the police in the possession of certain young men. It is one of the duties of this Directorate to enforce the Food and Drug Regulations pertaining to the sale of Schedule F drugs. In most instances the Police have found that prescriptions have been issued for the drugs; in other words, the drugs were obtained legally. There is a possibility that a considerable quantity of a drug may be obtained by an individual going from one practitioner to another and getting a prescription for the same product. Practitioners in the Metropolitan area are undoubtedly aware of this possibility and we have reason to believe that discretion is being used by practitioners in the issuance of prescriptions to youths for barbiturates.

Food and Drug Inspectors have observed, both in the Halifax area and throughout the Province, that a prescription for a Schedule F drug is sometimes refilled although the practitioner who issued the prescription did not specify the number of times that it should be refilled. Our findings point to the fact that this happens far too frequently. For this reason, a circular is being distributed to the pharmacists throughout the Province, through the courtesy and co-operation of the Nova Scotia Pharmaceutical Society, calling attention to the Regulations under the Food and Drugs Act pertaining to Schedule F drugs and particularly to the regulation regarding the refilling of prescriptions. The circular reads as follows:

“SALE OF PRESCRIPTION DRUGS”

(Schedule F Drugs Under the Food and Drug Act)

We would like to call the attention of all pharmacists in this Province to the Regulations under the Food and Drugs Act pertain-

ing to Schedule F drugs. They are outlined in Sections C.01.041 to C.01.047. Pharmacists are requested to note especially that a prescription for a Schedule F drug may not be refilled unless the practitioner so directs and specifies the number of times. We have reason to believe that pharmacists do not always strictly follow this regulation. This may be due in part to a failure on the part of the practitioner who issued the prescription to state unequivocally the number of times that it may be refilled, if refillable. For this reason practitioners are being requested through the medium of The Medical Society of Nova Scotia to specify clearly on their prescriptions for Schedule F Drugs the number of times they may be refilled.

We record with pleasure that pharmacists throughout the Province readily co-operate with the Inspectors of the Food and Drug Directorate whenever they are requested. Your continued co-operation and wholehearted support in the enforcement of Regulations pertaining to Schedule F Drugs will be most appreciated.

It should be noted that under the Food and Drug Regulations a pharmacist is not authorized to refill a prescription for a Schedule F drug unless the practitioner so directs and specifies the number of times that the prescription may be refilled. For this reason the full co-operation of the pharmacists in complying with this regulation cannot be obtained unless practitioners co-operate both with this Directorate and with the pharmacists in ensuring that they state unequivocally on a prescription for a Schedule F drug the number of times it may be refilled. This information or a "No Repeat" statement on a prescription will leave no doubt in the mind of a pharmacist what a practitioner means and perhaps will reduce the number of calls directed to practitioners by the pharmacists regarding the refilling of prescriptions. I am therefore requesting that practitioners throughout the Province specify on a prescription for a Schedule F drug the number of times it may be refilled.

The co-operation of practitioners in complying with this request will be most appreciated by our Directorate and will be very helpful in enforcing our Regulations pertaining to prescription drugs.

This has been brought to the attention of practitioners since it is recognized that they are perhaps more anxious than anybody to ensure that there is no misuse of potent drugs.

A. HOLLETT
A/Regional Director.

Food and Drug Directorate,
Department of National Health and Welfare,
Halifax, N. S.,
November 30, 1955.

NOTICE RE D.V.A. FEES

Doctor T. E. Kirk, Senior Treatment Medical Officer, D.V.A., has announced the following amendment to the schedule of medical fees (D. V. A.).

Effective January 1st, 1956 - Office - Day Visits may be charged for at the rate of \$3.00 per visit. If specially called at night between 8.00 p.m. and 8.00 a.m., Sunday and Emergency visits, office calls may be charged for at the rate of \$3.50.

The rate for House - Day Visits - has been increased to \$4.00 and for night, Sunday and Emergency visits the charge has been increased to \$4.50 per visit.

There is no change in the hospital visit rate.

COLLEGE OF GENERAL PRACTICE

Under the Chairmanship of Doctor F. Murray Fraser, twenty general practitioners, members of the College of General Practice of Canada, met on December 11th and formed the Halifax-Dartmouth Branch of the College.

Doctor J. Ray MacLean was elected chairman and Doctor Donald I. Rice, secretary.

Several committees were set up whose duties include, among others,

- (1) A study of the medical curriculum.
- (2) A study as to the feasibility of setting up a Section of General Practice in local hospitals, and of lectures to fourth year students by general practitioners.
- (3) A study of general practitioners needs in post-graduate education.
- (4) The preparation of a brief on Maritime Medical Care Incorporated to be presented to the Committee, set up by The Medical Society of Nova Scotia, which is at present studying the structure of the Corporation.
- (5) A membership committee to encourage and interest general practitioners to join the local branch of the College and support its objects and activities.

It is planned to hold a meeting in January to receive reports from several of these committees.

F. MURRAY FRASER

NOTICE

There is an opening for a doctor in Bass River, N. S. Anyone interested may obtain further information by writing Mrs. Willard A. Fulton, P.O. Box 118, Bass River, N. S.

Personal Interest Notes

Approximately two hundred persons gathered Saturday night, November 26th, in Acadia University Hall, Wolfville, at a special dinner given by the Board of Governors in recognition of Doctor C. E. Avery deWitt's service to the university and public at large.

Doctor deWitt recently retired as university medical doctor after thirty-six years in that office. Members of the board, faculty and their wives heard the guest of honour speak of his many experiences connected with campus life.

Doctor Watson Kirkconnell was master of ceremonies which saw the deWitts presented with complete sets of leather luggage.

Doctor R. S. Longley spoke for the faculty, while Doctor M. R. Elliott tendered the respects of the Board of Governors.

Major Fred Kelly, in speaking for the physical education department, mentioned that no athlete of the university had suffered permanent injury from anything which had transpired on the playing field. He felt this was a unique record and said it was only possible through Doctor deWitt's attentive service.

Dr. J. J. MacRitchie, Divisional Medical Health Officer of the Department of Public Health and Inspector of Humane and Penal Institutions, who has served on the staff of the department since 1931, recently retired. Doctor MacRitchie also served as medical consultant to the Department of Public Welfare. The staff of the Department of Public Health presented him with a gift of a purse and a chair.

Doctor and Mrs. F. H. Hicks of Vienna, Austria were guests during October of Doctor Hicks' brother, Premier Henry D. Hicks and Mrs. Hicks in Halifax.

At the annual meeting of the Halifax Branch of the Mount Allison Alumni Association held in Halifax in October, Doctor D. K. Murray of Halifax was elected President.

The annual meeting of the Nova Scotia Branch of the Federation of Medical Women of Canada was held October 17th at the home of Doctor Roberta Bond Nichols in Halifax.

Doctor Florence Murray, one of the original members of the Federation, was guest speaker. Doctor Murray, on furlough from Korea, gave an illustrated talk, showing slides on that country and the buildings and inmates of the hospital of which she has been administrator.

A welcome visitor to the group was Doctor Grace Cragg, recently returned from her psychiatric practice in the Medfield State Hospital, Medfield, Massachusetts.

Officers elected were Doctor Moya Saunders as President, Doctor Marjorie Smith, Vice-President, and Doctor Helen M. Wilks, Secretary-Treasurer.

Doctor H. B. Atlee of Halifax was one of the speakers at the annual convention of the Royal College of Physicians and Surgeons in Quebec in October.

Doctor G. B. Shaw of Halifax, medical director of Maritime Medical Care Incorporated, attended a meeting of directors of medical plans in Canada in Winnipeg in November.

Congratulations to Doctor and Mrs. R. G. A. Wood of Lunenburg on the birth of a son on July 18th (this was given in error in the October issue as September 5th); to Doctor and Mrs. P. D. Ferguson of Cleveland on the birth of a son, September 5th, and to Doctor and Mrs. R. N. Anderson (Marion Seaman, R.N.) of North Sydney, on the birth of a daughter, Barbara Jean, on November 12th.

Dr. L. M. Morton of Yarmouth, accompanied by Mrs. Morton, left recently by car to spend the winter in Florida and the southern States. They plan to visit relatives in California before returning next spring.

Doctor J. K. Morrison, Dal. 1943, who has been practising for nine and a half years at St. Peters is now studying hospital administration at Camp Hill Hospital, Halifax.

The marriage took place in New Glasgow on November 26th of Charlotte Ann McKay, only daughter of Doctor and Mrs. Hugh F. McKay and Doctor Oliver Harris Millard, son of Mrs. Grant S. Sherman and the late Oliver P. Millard of Liverpool. Doctor Millard graduated from Dalhousie Medical School in May of this year, and is at present attached to the R.A.M.C. in Halifax.

Doctor A. F. Weir of Hebron, Yarmouth County, is a patient in the Yarmouth Hospital, and making good progress following a coronary attack.

Doctor W. M. Phinney, Ear, Nose and Throat specialist of Yarmouth, is in the Yarmouth Hospital suffering from a fractured pelvis and other injuries resulting from a bad fall.

The Yarmouth Hospital Commission is seriously considering recommending the construction of a new wing to contain business offices and an obstetrical unit.

NOVA SCOTIA MEDICAL BULLETIN

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Abbreviations used:—Ab. for abstract; anon. for anonymous; biog. for biographical note; C. for correspondence; C.R. for case reports; diagr. for diagrams; Ed. for editorial; illus. for illustration; Pers. for personal item; port. for portrait; rev. for review.

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