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(Figures approximate as at Oct. 21, 1940.)

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Lipoid Nephrosis*

GEORGE H. MURPHY, Jr., M.D., C.M.,

—and—

RALPH P. SMITH, M.D., D.P.H.,

IN an attempt to distinguish between the inflammatory and the purely degenerative lesions of the kidney, Muller (1905) introduced the term "nephrosis" for the latter. Volhard and Fahr (1914) elaborated this theme and laid down clinical and pathological criteria to which but little has since been added. To them "nephrosis" is characterized by a marked oedema and albuminuria, without hypertension, cardiac hypertrophy, haematuria or uraemia. They also noted a hypercholesterolaemia, a decrease in plasma proteins and a reversal of the normal albumen/globulin ratio. Pathologically, the kidney in their lipoid nephrosis—or "genuine" nephrosis as they called it—belongs to the large, pale kidney type with a smooth surface and a thickened cortex showing yellowish streaks. The glomeruli are normal or reveal only minimal focal lesions, while the tubules, particularly the convoluted ones, exhibit merely a marked deposit of a lipoid material in their cells.

The subject has aroused great controversy since Epstein (1917) described his "chronic" nephrosis which he believed to be metabolic in origin. Since then some clinicians, notably Christian (1929) and Gainsborough (1929) and some pathologists, notably Bell (1929) and Shaw Dunn (1934) have denied the existence of lipoid nephrosis as an entity, maintaining it to be a phase of a glomerulo-nephritis. However, Leiter (1931), Shapiro (1930), Murphy et al (1938), Randerath (1937) and Fahr (1934) all believe in the existence of the condition as a true clinical and pathological entity distinct from glomerulo-nephritis though closely related to it. Fishberg (1939) in an exhaustive review of the subject in his book on Hypertension and Nephritis strongly supports the latter hypothesis under the term "chronic nephrosis".

The following case presents some points of interest in this connection:—

The patient, a male white child 5 years old, was admitted to the Victoria General Hospital on August 14, 1940, complaining of "swelling all over the body".

The family and personal histories were irrelevant.

He suffered from a very mild attack of measles 9 weeks previously which cleared up rapidly, but about 3 weeks later the mother noted some puffiness around the eyes. In a few days the rest of his body became oedematous. In spite of treatment his condition failed to improve.

On admission, the only significant finding was a generalised anasarca. The abdomen was tense with fluid and moist rales were heard at both bases. The Blood Pressure was 100/60.

Magnesium Sulphate therapy had no noticeable effect, the oedema steadily increasing. Paracentesis was performed and a large quantity of clear serous fluid withdrawn. He continued more or less unchanged till about

*From the Department of Pathology, Dalhousie University.

September 6, 1940, when his temperature rose to 100.8°F. and continued rising up to 102° and he died on September 10, 1940, with a clinical diagnosis of Chronic Hydraemic Nephritis.

The laboratory findings revealed a moderate degree of hypochromic microcytic or secondary anaemia; Haemoglobin 75 per cent; red cell count 3,640,000 per cu. mm; and white cell count 9,200 per cu. mm.

The blood chemistry taken on August 17, 1940, was quite normal:

Sugar.....	0.0869%		
Total non-protein nitrogen.....	24.78 mgs. per 100 cc.		
Urea Nitrogen.....	11.58	"	"
Uric acid.....	3.05	"	"
Creatinine.....	1.11	"	"

All the specimens of urine, which were examined by the interne, showed marked albumen, with the specific gravity ranging between 1028-1032, some granular casts and red cells. One specimen revealed numerous red cells.

An autopsy there was a marked oedema throughout the body with large collections of fluid in the serous cavities. The fluid in the peritoneal cavity, which was greenish and rather foul smelling, revealed numerous pneumococci.

Lungs, liver and spleen showed a few minute yellowish nodules which proved to be tuberculous on histological examination.

The kidneys were both somewhat enlarged and pale. On cut section, the surface bulged slightly and the capsule stripped easily leaving a smooth pale surface. The cortex was thickened, the vascular markings visible and yellowish streaks were seen at the cortico-medullary junctions.

Frozen sections of the kidneys stained with Sudan III revealed marked fatty change in the convoluted tubules. Haemotoxylin and Eosin sections showed no evidence of change beyond a slight swelling of the glomeruli. Further sections stained with Mallory's Aniline Blue did not reveal any thickening of the glomerular capillary basement membranes, though there was possibly some increase in cellularity of the tufts. There was no tubular atrophy.

The Pathological Diagnosis is thus a Lipoid Nephrosis with a terminal Pneumococcal Peritonitis and Tuberculosis.

Discussion

The controversy on the subject of lipoid nephrosis has centered mainly on the difficulty in distinguishing the condition from a true glomerulo-nephritis, and whether such a distinction is advisable or even possible.

The case presented here shows the marked oedema and albuminuria without hypertension or cardiac failure following the criteria of Volhard and Fahr (1914) and later writers. Further clinical data here is unfortunately not available as no blood cholesterol or plasma protein examinations were made.

The gross and histological appearances of the kidneys are also in keeping with a diagnosis of lipoid nephrosis. Bell (1929) maintains that in all cases of so-called lipoid nephrosis, glomerular lesions can be demonstrated by careful study using Aniline Blue and Orange G stains. These lesions he describes as a thickening of the basement membranes of the glomerular capillary tufts and an increase in their cellularity. He regards the condition as a form of glomerulonephritis in which the glomeruli are damaged but the capillaries only partly obstructed so that their function continues and tubular atrophy does not occur. Shaw Dunn (1934) also states that the essential lesion is glomerular and consists of "an abnormal permanent patency of the capillaries"

mechanically causing the oedema and albuminuria. He demonstrates this patency in sections using special stains.

In this case, however, in spite of careful study, no evidence of such thickening of the basement membranes could be demonstrated. Slight increase in the size of the glomerular tufts and possibly some increase in their cellularity were seen, but in some of the sections a closely similar picture to that described by Shaw Dunn as showing permanent patency were identifiable.

The sole part of the clinical picture here which is at all at variance with the accepted criteria is the haematuria. Again it may be mentioned that the interne's findings in the urine were, unfortunately, not checked by the pathologist. However, some degree of haematuria may not be incompatible with a diagnosis of lipid nephrosis. Thus Murphy et al (1938) report 3 of their 9 cases as showing some red cells in the urine. Gainsborough (1929) and Landis and Elsom (1937) also describe cases showing some haematuria, but they believe this to be further evidence of true glomerulo-nephritis. The latter workers using Addis Counts found 200,000 to 800,000 red blood cells excreted in twelve hours in three patients with the nephrotic syndrome.

Murphy et al (1938) stress the importance of long observation before diagnosing lipid nephrosis and possibly this case might have showed more conclusive evidence had the patient not succumbed from an inter-current infection. These and other authorities also have observed that cases of pure lipid nephrosis have a considerably better prognosis than those of glomerulo-nephritis.

It is interesting to note the prevalence of pneumococcal peritonitis in cases of lipid nephrosis. A notable percentage of the recorded cases have died with pneumococcal peritonitis. Bell (1929) reports 11 out of 24 cases terminating in this manner.

Although the clinical findings are not complete, this case shows most of the criteria of a pure lipid nephrosis. The significance of the haematuria is obscure, but in the absence of demonstrable glomerular lesions, it does not seem to prohibit a diagnosis of lipid nephrosis.

At present it would seem impossible to say definitely whether or not lipid nephrosis is a completely distinct pathological entity; further work may possibly elucidate this. However, it can be stated that there is a distinct clinical picture, as already outlined, which has in general a better prognosis than a frank glomerulonephritis, and which shows none of the pathological lesions of the kidney associated with the latter. On this basis at least the use of the term nephrosis is justified.

Lipid nephrosis would seem to be caused by a hyperpermeability of the glomeruli due to some non-inflammatory process, thus causing albuminuria, oedema and a deposit of lipid in the tubules. Such a conclusion is supported by most of the recent workers, Fishberg (1939), Murphy et al (1938, etc.)

Summary

A case of so-called lipid nephrosis with a discussion of the clinical and pathological findings and its relationship to glomerulonephritis is presented.

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*Quoted by Murphy et al (see above).

Gallows Knoll*

A Unique Hospital Link with the Halifax of Yore

CLAIRE HARRIS MACINTOSH

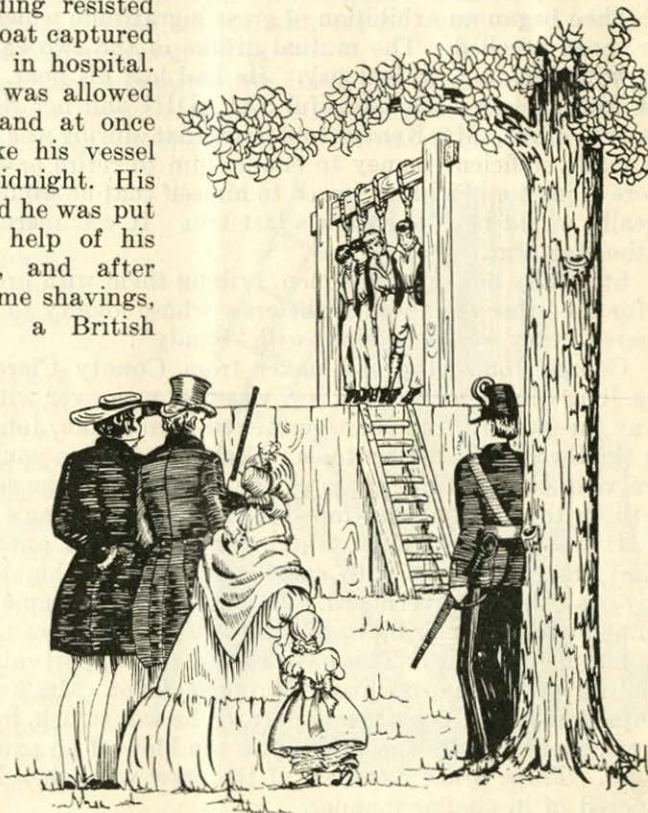
APPROACHING the Victoria General Hospital, Halifax, one is impressed by the unusually extensive lawns, the beautiful trees and the long encircling driveways. To those who know the stirring history of "The Knoll," near the centre of these grounds, much interest is added.

The story, which reads like a chapter of fiction, is, unfortunately, a true one. It is also gruesome, as those of pirate days often are.

The chief character in the drama was a Captain George Fielding who, in 1842, set sail from Liverpool, England, for South America as master of the barque, VITULA. He took with him his fourteen year old son and a crew of fourteen.

Buenos Aires was visited, and then Valparaiso, but business was disappointing and he decided to make an attempt to smuggle a cargo of guano from Peru; for this purpose he followed the coast to the island of Chincha. The government, however, heard of his intentions and sent a force of fifty soldiers to seize his ship. Fielding resisted but was wounded, his boat captured and he, himself, placed in hospital. When able to leave he was allowed the liberty of the port and at once began scheming to take his vessel out of the harbour at midnight. His plan was discovered and he was put in prison. With the help of his young son he escaped, and after hiding for two days in some shavings, they found refuge on a British steamer and reached Valparaiso once more.

Fielding now faced disgrace and financial disaster. He and his son sought passage to a British port but were refused. He, however, finally persuaded Capt.



Claire Harris MacIntosh, who in private life is the wife of Dr. Geo. A. MacIntosh, General Superintendent of the Victoria General Hospital, Halifax, is an author of note whose works of prose and poetry and whose pageants are well known to Canadian readers.

*Reprinted from *The Canadian Hospital*, September, 1940.



"Sandy" MacKenzie of the barque SALADIN (from Newcastle) to give them a free passage to London.

Then began an exhibition of gross ingratitude which surely has seldom, if ever, been excelled. The mutual dislike of the two captains grew to hatred and, with Fielding, to jealousy. He had lost his boat. Why not, he argued with himself, seize the beautiful SALADIN and her rich cargo of silver and copper? Capt. MacKenzie told him that during the last twenty years he had made sufficient money to enable him to retire and this was his last trip before doing so. Fielding vowed to himself that he would make quite sure that it really would be MacKenzie's last trip. It was merely a matter of mutiny on the high seas.

Stealthily he picked his men, bribing them with promises of rich rewards. As for the other members of the crew whose loyalty to Capt. MacKenzie was apparent, they would die along with "Sandy"!

George Jones, the sail-maker from County Clare, a cripple who, like long John Silver, wore a peg leg, was first won over with bribes. Young Galloway the steward, Bill Johnson the red-haired man, John Hazelton and Anderson the Swede became his tools. Fear seized these young lads, none of whom were over twenty-three years of age, but once in the secret they knew it was death for them also if they failed to carry out Fielding's orders.

It was during a night watch that, one after another, the victims were slain—first, the mate, with carpenters' tools, as he slept on the deck. His body was thrown overboard. As the carpenter came up the hatch he was stunned with hammer blows and thrown into the ocean, but the water revived him and he cried out. This gave Fielding an opportunity which he seized; the shouting of "man overboard" brought Capt. MacKenzie hurrying up the companion-way. As his head appeared he was struck, but he vigorously fought his opponents finally succumbing to the blow of an axe from his "guest" passenger. Three other members of the crew were then killed and their bodies disposed of in similar manner.

The ship's course was then changed and headed toward Newfoundland, the mutineers taking over at Fielding's command while he spent his time drinking and gloating over his treasures.

Dawn broke into a radiant Sunday morning. Fielding called the other murderers into his cabin, brought out his Bible and, in turn, each man kissed the Book and swore to be loyal and brotherly to each other. Already, however, there was an atmosphere of suspicion—another mutiny was brewing.

The members of the crew had reason to believe that Fielding was plotting their lives in order to be sole owner of the ship and cargo. He was seized, gagged and bound and his fate discussed by the blood-stained crew, as he lay before them. They were not safe, they argued, while such a traitor lived and so he and his son (also implicated) followed the fate of those who, at his command, had so recently found an ocean grave.

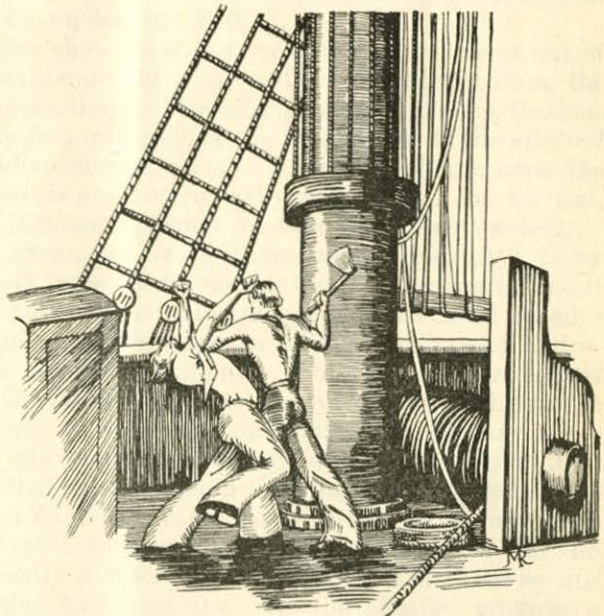
With all sails set the SALADIN neared her end. On May 22, with her drunken crew on board, she drove hard on the island at the mouth of Country Harbour, Nova Scotia, at a place ever since known as Saladin Point.

Confusion reigned as the boat was boarded by would-be rescuers. The story of the six sailors did not agree and they were, forthwith, arrested and brought to Halifax. The blood-stained, death-ship Saladin, became a total wreck. Her figurehead which was, in accordance with her name, a turbaned Turk, was brought to Halifax and is still preserved as a souvenir. The soul of the ship, however, sleeps in the deep with her motley crew.

The six men were jailed in the provincial penitentiary on the North West Arm. Day after day they gazed at this beautiful expanse of water and verdant hills beyond, and repented. Each, of his own accord, wrote and signed a confession depicting the hideous occurrences.

As the murders had been committed on the high seas, outside the jurisdiction of any Nova Scotian Court, a special court was constituted. This was held in what is now the library of the Province House. The Admiral of the station, in full naval uniform, sat as judge and with him were the Chief Justice and three puisne judges. Four of the criminals were found guilty and sentenced to be hanged.

On July 30th., 1844, a procession which included the sheriff in a gig, the four murderers in two closed carriages, and one Anglican and three Roman Catholic priests, wended their way to The Knoll, on what was then known as the South Common. On each side marched a strong guard of the 1st Royal Regiment, with fixed bayonets. A company of the 52nd Foot Regiment formed a circle around the



scaffold and kept the large "audience" at a distance. The writer was privileged to meet Mrs. Lenoir, an esteemed citizen, who died recently at the age of one hundred and three. Mrs. Lenoir, when a child, was present on the occasion of these executions, having been taken there by her elders.

We will not dwell on the executions—the climax of the tragedy. Following the simultaneous deaths the bodies were committed for burial. The Earth, not the Sea, received them. Their story lives on in ballad form and in the occasional quests by treasure seekers for pirate booty from the Saladin. In keeping with the whole sad affair the exhumed skull of one of the gallows' victims has since been used to teach anatomy to medical students.

To-day the Gallows Knoll adds to the beauty of a hospital's grounds. No gibbering, sheeted apparitions haunt it on moonlit nights and, contrary to the old citizens' tales, no ghostly procession drifts noiselessly once each year through the streets of Halifax to its grassy slopes. Much travelled paths encircle the mound thus setting it apart, but the paths continue and lead to an institution of health, of life-giving and saving,—an institution where human sympathy, understanding and skill unite for the benefit of mankind.

The Heart in Pulmonary Tuberculosis

THOMAS A. LEBBETTER, M.D., Yarmouth, N. S.

ONE of the comforting things about pulmonary tuberculosis is that despite its ravages the heart remains relatively undisturbed. However, many different etiologic types of heart disease may be associated with pulmonary tuberculosis. In a series of 1000 completed records studied from patients admitted to the Philadelphia General Hospital in 1935 with pulmonary tuberculosis, in addition to their tuberculosis, a clinical diagnosis of some form of cardiovascular disease was only made in 8.7 per cent. These included the various gradations from arteriosclerotic (24 males, 11 females),

Valvular Disease (3 males, 3 females),

Hypertensive Heart Disease (6 males, 5 females),

Luetic Heart Disease (8 males),

Pericarditis (2 males, 2 females),

Endocarditis (1 female),

to myocardial degeneration (11 males, 11 females).

The tuberculous patient frequently complains of palpitation and precordial pain with or without exertion. Dyspnoea and tachycardia are usual symptoms even in the earliest recognizable stage. Ectopic beats are common. Cyanosis and oedema are seen in many advanced cases. Gallop rhythm may develop during febrile exacerbations or during the terminal stage. And so we find that many signs of a cardiac disability may be present and these often need careful evaluation. The presence of auricular fibrillation or an A-V Block are not usually found unless myocardial damage exists. Traction of the heart to the right of the mid-line by fibrosis or large right cavitation may produce cardiac phonetics suggesting the possibility of an aneurysm of the aortic arch. Alterations in the rate and rhythm may occur in the presence of an active infection. The effort syndrome is not an uncommon finding.

A careful study of statistics shows that in from three to five cases out of a hundred tuberculosis may subsequently involve either the pericardium, the myocardium or rarely, the endocardium. The effects of tuberculous adhesions upon a normal heart may be a factor in pulling the heart towards the affected side and give misleading cardiac measurements. Under the fluoroscope the heart of the tuberculous patient is characteristically small. It is the vertical, dropped or pendulum type. It bears a normal relation to the body weight.

When tuberculosis does effect the heart, tuberculous pericarditis is by far its most frequent and most important complication. It occurs in about 3 per cent of all autopsies on tuberculous patients. It is found in all decades from the second to the seventh. At Philadelphia it was found twice as frequently in the coloured as in the white patients. This type of pericarditis presents an entirely different clinical picture from the type found in rheumatic fever. The signs and symptoms of the active pulmonary disease may mask the pericardial changes. In the so-called primary tuberculous pericarditis, one is dealing with an insidious malady; a mild pyrexia, asthenia, some precordial pain with or without a friction rub. These patients have very little discomfort, and yet a considerable amount of fluid may be present. In the rheumatic type they are distinctly ill and confined to bed. This likewise applies to the type found complicating nephritis. As the effusion progresses

symptoms appear, noticeably dyspnoea. The presence of a large amount of fluid causes surprisingly little changes at the lung bases. In one-third of the cases leucopenia is present. The rheumatic type principally attacks children and young adults and is rare in later life. In the tuberculous type the effusion is large, *sometimes enormous*, and the fluid hemorrhagic.

One must keep in mind the presence of pericardial fluid in hearts with increased left border markings. It is wise to turn the patient on his right side and see if the change in position shifts the area of dullness to the right side. At post mortem as much as 2 to 3000 c.c. of fluid has been found in the pericardium of the tuberculous type. The to and fro pericardial friction rub is easy to miss. It is heard best at the precordium. The presence of Ewerts sign (loud tubular breathing left scapula) plus a prolonged P—R. interval, together with an increased sedimentation rate and white cell count, helps in the differentiation. The X-ray of pericarditis presents a distinct configuration, the bottle or apple-shaped type of heart. The electrocardiogram shows RS-T and T wave changes somewhat similar to those found in acute coronary occlusion. There is a diminution in voltage of the QRS complex and an elevation of the RS-T segment in three standard leads. As the effusion absorbs, these last named abnormalities disappear and a T wave inversion may then be found in all leads. The entire disappearance of the effusion may result in a normal electrocardiogram. These changes can be attributed to myocardial infarction and frequently are, despite the fact that the latter presents a typical pattern of its own. Compression of the coronary arteries by exudate and involvement of the underlying myocardium is considered the cause of these graphic changes. In a case of primary malignancy of the myocardium studied by Dr. L. M. Morton and the writer, these changes were typical; the pericardial effusion at p.m. measured 600 c.c.

Tuberculosis of the myocardium is rare. Only 222 cases have been reported; while tuberculosis of the endocardium is distinctly rare. In a report of 900 consecutive necropsies done at Duke University on patients with pulmonary tuberculosis, endocardial lesions were found in only six. In five of these, small tubercles were scattered over the endocardium occurring as part of a generalized miliary infection. It is comforting to know that the toxic action of a tuberculous process in the body does not produce any sclerotic changes in the endocardium, myocardium or calcify the cardiac valves. In studying any endocardial involvement, we must distinguish and evaluate the functional systolic murmur, the cardiorespiratory—inspiratory or blowing systolic bruit at the apex found so frequently and considered physiologic. The absence of any cardiac enlargement usually clears up any doubt. Chronic cor pulmonale may result from right ventricular strain induced from tuberculous lesions in the mediastinum or a chronic pulmonary disease (emphysema; pulmonary collapse; pneumoconiosis, etc.) Here the pulmonary artery and conus may be enlarged. A basal systolic murmur and thrill may eventuate. One may expect here an accentuation of the pulmonic second sound.

In extensive chronic pulmonary involvement from widespread pulmonary fibrosis, dyspnoea, tachycardia and cyanosis may result. It must not be disregarded that these symptoms are likewise characteristic of myocardial disease.

Hypertensive heart disease is only infrequently associated with tuberculosis. In a series of 240 cases examined in Boston by Ayman, only one was present in 240 cases. When we recall that 15 per cent of all adults have hypertension, this fact is worthy of note.

Coronary occlusion is seldom observed in cases of tuberculosis. Pul-

monary embolism, however, which closely simulates coronary infraction in its symptomatology does occur more frequently than is generally appreciated. It is a frequent cause of the acute type of the cor pulmonale above mentioned.

The following chart shows the incidence of heart disease at the White Haven Sanatorium during 1935:

Patients Admitted to the White Haven Sanatorium in 1935.

Age	With Heart Disease		Without Heart Disease		Total
	Male	Female	Male	Female	
7-19 years.....	1	0	19	26	46
20-29 years.....	4	4	58	86	152
30-39 years.....	3	2	46	42	93
40-49 years.....	3	2	55	12	72
50-59 years.....	5	0	32	3	40
60 and over.....	5	0	7	3	15
Total.....	21	8	217	172	418

Classification

Stage of Disease	With Heart Disease		Without Heart Disease		Total
	Male	Female	Male	Female	
Minimal.....	1	2	20	17	40
Moderately advanced.....	2	0	28	39	69
Far advanced.....	12	3	67	48	130
Non-tuberculous.....	6	3	34	13	56
Miliary tuberculosis.....	0	0	0	1	1
Still in Sanatorium.....	0	0	68	54	122
Total.....	21	8	217	172	418

Generally speaking then, tuberculosis neither predisposes to, nor insures against, organic heart disease. Mitral stenosis can and does occur in tuberculosis. The infrequency of myocardial disease even in the presence of structural cardiac defects may be the result of the rest and care given the tuberculous patient. Pulmonary tuberculosis may be present with structural defects of the heart but even the two when co-existent seldom lead to congestive heart failure. Electrocardiographic studies are frequently necessary in order to distinguish between the presence and absence of myocardial disease.

Specialists in pulmonary tuberculosis frequently overlook the presence of cardiac abnormalities due to the fact that pulmonary tuberculosis may produce somewhat similar symptoms. While the pattern of the symptoms may be explained by the lung pathology one cannot entirely disregard the possibility of a co-existing heart disease.

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The Capitulation of France

J. EMILE LEBLANC, M.D.,
West Pubnico, N. S.

MANY of my readers may contend that the subject we are selecting at this moment is not a proper one to be dealt with in a medical review, yet it is one of grave concern; one which should interest the medical profession not only of this province, not only of Canada, but of the whole world.

Two reasons have prompted us to write an essay on France: first, the somewhat unsympathetic denouncement of the press in some parts of America; and secondly, the love of our mother land, of her soul, of her literature, of her thinkers, of her charity towards us all: a country whose ideals are always magnanimous when it comes to promote the great causes of justice, of freedom of civilization—in one word: of democracy.

We would not wish to assume that what we say is *infallible* in the face of contemporary history, because the issue is too complicated to be dealt with in a small paper such as this. If there is anything hard to do in this world, it is to speak harshly of a mother, particularly when she suffers. That is precisely the case with us at this present moment. We shall speak therefore of France, of its capitulation with as little "criticism" as we possibly can, and in so doing "may the immortals" like the philosopher of old, "compel us to say nothing which may invite rebuke".

We are all familiar with the history of Europe at the time of the Franco-Prussian War. Then, France encountered a tremendous loss. The Treaty of Frankfurt took away from her, Alsace and Lorraine, and compelled her to pay a war indemnity of five billion francs. Not before all this was paid, did the German soldiers leave the French soil, her principal towns and cities. France received *not one day of grace*, not one token of sympathy, until she had fully paid her war indemnity.

The war of 1914-1918 broke out, and once again she had to bear the brunt of the battle on her soil, over the very spots she had fought in 1870. This time she was victorious, and with what results and consequences we all know. The war was fought in Northern France and most of her wealthiest industries were destroyed. The destruction was tremendous and unless a heavy war indemnity was promptly paid to her, bankruptcy was sure to follow. The treaty of Versailles was signed, which stipulated indemnity for reparations. Conferences after conferences were held to compel Germany to pay, as she was reluctant to meet her obligations. Germany refused, as we all know. She did not pay even the equivalent of indemnity which France paid her in 1870.

And now we come to the war of 1939—to the sad episodes of June 1940. On the 22nd of June, France, allied to England by a sacred pact, capitulated. Before the capitulation, her politicians who guided the destiny of the Third Republic, resigned their posts and gave their place to the oldest, to the greatest of soldiers, Marshall Petain, the one who had said at Verdun, twenty-two years ago: "They shall not pass".

Let us now examine the facts. On the 22nd day of June, the French army was in the presence of the German army. 300,000 Belgian soldiers had been demobilized by the order of their king, Leopold III, the one who had asked

help from the allies a few days before. The English army was able to evade the enemy, when crossing the English Channel. There were still English divisions in the vicinity of Rouen. The Maginot Line, the hope of the allies, was no longer a protection. Refugees, coming from the invaded parts of France and Belgium were paralyzing the march of troops. Errors had been made. Bridges which should have been demolished were left intact and the enemy was entering into France without obstacles. The Fifth Column was functioning everywhere. The President of the Republic, Paul Reynaud, begged for more help from England and the United States, insisting more and more upon the gravity of the situation and the seriousness of the hour. General Weygand, a hero of the last war and once the right hand of Marshall Foch, was called at the eleventh hour to conduct an army of soldiers partly "demoralized"—There were on the field of battle 2,500,000 German soldiers with material and munitions far superior to that of the allies, against 900,000 allied soldiers. The proportion was uneven. Besides, if we compare the *morale* of the two armies, the disproportion is still greater. On the one hand, we have a large army which has made several conquests; and on the other a smaller army, demoralized, exhausted, which knew very well what Foch had said in 1918: "When we have lost the Rhine, we have lost everything". Not only had they lost the Rhine, but also the Maginot Line upon which France had based her unlimited hope and confidence.

It is then that the politicians ceded the reigns of government to Marshall Petain and Weygand. Better than any other men did they know the weakness of the French army. Better than any others did they know that the soldier of a country who elects seventy-two Communists to the Chamber of Deputies, is far different to the soldier of 1914-1918. Petain and Weygand knew very well that the continuance of war meant mutilation of the towns and cities of Northern France; mutilation of all civilians, of women and children and that their first and paramount duty "*now*" was to save the people. "*Salus populi suprema, lex esto*": The protection of the people, is the supreme law".

This is precisely what took place and this is what we have endeavored to explain. We have not touched here the ultimate causes which led to the downfall of France. That perhaps may make the subject of another essay, when we know more about the situation as it is today. What we can say now is that a new constitution has been framed with the new motto of "Labor, Family and Fatherland", substituting the famous cry of the "Republique Francaise", "Liberty, Equality, Fraternity".

In the face of these facts, we in Canada would like to know something more about what is taking place, and what is to take place. That is impossible. One thing is certain: We are facing a tremendous task, a task which ultimately will lead to Victory. Might cannot win. Today, France who with England was the glory of the world, is under German domination. Her sword is broken, but in her misery she still prays for her liberation. More than ever will she prove to the world this eternal truth, that as long as an *ideal* dwells in the heart of a nation, no one has the right to despair. Some day, France, when England will have crushed the enemy, will come back to herself and will continue to enlighten the world with that light which the world cannot do without.

We, in Canada, know very well what would mean defeat. It would mean the abolition of what we hold most dear. It would mean everything which was an inspiration to us in the past. We would see no more our flag flying as

usual. Our British Institutions which granted us our liberty, would disappear, and no more would we be treated as human beings, but merely as servants of the State.

What will be the final outcome of this capitulation, no one can prophesy. It is deeply sad to have to relate this with so few authenticated documents at our disposal. What we can do is to hope for the best. In conclusion, let me quote you the very words of a lady who came from France recently. "How uncertain the future is!... But one thing is certain, France has nothing to gain by a victorious Germany. Civilization or rather Nazi-barbarism is anti-christian. Our hope is the defeat of the enemy and the triumph of our allies. I have a great deal of esteem for Petain and de Gaule. They are two outstanding men, worthy patriots of our fatherland, endeavoring to serve her to the best of their ability."

From our knowledge of France and our intimate association with illustrious Frenchmen, we cannot believe that in this supreme struggle for the survival of Democracy there are not in France today, under the shadow even of the Vichy Government many, many brave Frenchmen who will never rest until the German attempt to overrun Europe is stifled and rendered extinct.

Editor's Column

November 14, 1940.

Dr. H. G. Grant,
Dalhousie Health Clinic,
Halifax, N. S.

Dear Dr. Grant:

The General Secretary of the Order of St. John writing from St. John's Gate, Clerkenwell, London, England, has notified us that the following Physicians have been made Honorary Life Members of the St. John Ambulance Association.

Dr. R. B. Eaton
Lt. Col. J. D. G. Campbell
Major F. F. P. Malcolm
Dr. A. M. Marshall
Dr. A. E. Murray
Dr. B. W. Skinner
Dr. M. D. Brennan
Dr. J. R. MacLean

Because of the war the parchment scrolls usually presented at the time the appointments are announced can not be prepared. The General Secretary has undertaken to see that they are forwarded through the usual channels at a later date.

These awards are made as a token of the gratitude of the Order for the work these gentlemen have contributed free of charge in teaching and examining classes in First Aid and for their general interest in the welfare of the work of the Association.

Yours very truly,
Edgar W. Mingo,
Hon. Sect'y
Nova Scotia Branch.

We are publishing in this number a rather unusual article for this type of journal entitled "The Capitulation of France" by Dr. J. E. LeBlanc. Those of us of British extraction quite naturally think of some part of the British Isles when the term motherland is used and are apt to forget that many fellow Canadians use this expression and that of the "old country" to mean any one of half the countries of Europe. To us of the East with a background of many generations in the New World the motherland refers to either Britain or France. The author is prompted by "the love of our motherland" to write this essay on France. Possibly neither this son of the pioneers, this Acadian, nor any of his forebears for generations have laid eyes on the countryside of France, and yet he refers to it as "motherland". Acquainted with her language from the cradle—his mind has been enriched by her literature—his heart cheered by

her music, his soul inspired by her political and religious tolerance, and his life sweetened by the example of her charity which never refused sanctuary to the oppressed—in short, France is his spiritual motherland.

Although Canadians may vary in their racial ancestry it augers well for this country if honour is ever paid to the enobling things of the spirit giving heed to whatsoever things are true, honest, just, pure, lovely and of good report, unprejudiced by their origin.

Although Dr. LeBlanc's contribution is not of a medical character, the Editors nevertheless feel that his many friends in the Society will approve of their action.

H. W. S.

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Your very truly,
Edgar W. Munro,
Gen. Secy.
Nova Scotia Branch.

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CASE REPORTS

Two Interesting Obstetrical Problems.

Perhaps in no field of human endeavour as in obstetrics may one be faced with so wide a variety of problems. In all, the goal striven for is the same; to deliver a living uninjured mother of a living uninjured child.

The following two cases are presented with the above in view.

Case No. 1. Mrs. J. D., a seventeen year old, white primipara, due on September 14th, was admitted to Dr. H. B. Atlee's service at the Grace Hospital on September 18th, in labour.

The patient had been attending the prenatal clinic of the Dalhousie University Medical School regularly and nothing unusual was noted during her pregnancy. The pelvic measurements were satisfactory, the outlet being 9.5 cms. For the sake of completeness rather than actual significance, it may be noted that the interspinous measurement was 27 cms., the intercrystal 29 cms. and the external conjugate 19 cms. Vaginal examination by an obstetrician of wide experience and trusted judgment revealed an ample bony pelvis, the promontory was not felt, the internal conjugate was ample, and no possible obstruction to the delivery of an average baby was found. History and general physical examination were essentially negative.

On admission, the position of the baby was diagnosed as R. O. T., with the head floating above the brim of the true pelvis. Palpation of the cervix by rectal examination showed it to be thick and undilated. Slight tenderness was found over the lower uterine segment, but no other abnormalities were noted on abdominal examination. The contractions at this time were moderate in strength and irregular in frequency, but the patient complained bitterly of the pain. The contractions continued thus throughout the day, and Heroin was given p.v.n.

On September 19th, the day after admission, the contractions became stronger and more frequent, every ten minutes, and the tenderness over the lower uterine segment became more marked. The patient complained of severe pains, more than one would expect from the strength of the contraction. The foetal heart sounds remained good, but the head was not entering the pelvis and the cervix was only open enough to admit one finger (rectal examination). Ample micturition was maintained, and no signs of exhaustion were evident, the temperature and pulse remaining normal. Proper rest was insured by the administration of Heroin and Nembutal.

On September 20th, the contractions were of varying strength throughout the day; at times strong and frequent, e.g. every three minutes, and at times weak and irregular. It was noted whereas normally the pain is felt after the contraction begins and leaves before the contraction is over, in this patient, the converse was true. The pain was felt before the contraction and persisted for a time after it had disappeared. Tenderness over the lower uterine segment was becoming more marked. The head still remained floating above the pelvic brim, and the cervix did not dilate. The foetal heart sounds remained good. Throughout the labour, adequate nourishment was maintained and

proper rest, mental and physical, was insured by the continued exhibition of Heroin and Nembutal. No signs of exhaustion were evident.

On September 21st, condition remained as on the previous day; no progress of the head was noted, the cervix did not dilate, and tenderness over the lower uterine segment was marked. The pains were very troublesome; the foetal heart sounds remained good; the membranes had not ruptured.

The patient had now been in labour seventy hours with no progress and it was felt that active interference was called for. Under the above stated conditions, the cervix being very slightly open and the head floating above the pelvic brim, the use of forceps was contra-indicated. There had been nothing done to preclude Caesarean section and this was considered the best means of terminating labour and affecting delivery. Consequently, the low transverse Caesarean section was performed under general anaesthesia at 3.10 p.m. on September 21st, and the patient was delivered of a living female child, weighing 6 lbs. 5½ oz. An uneventful recovery followed and the patient was discharged on the eighteenth post-operative day.

The question naturally arises, why could not the patient deliver spontaneously, why did not the cervix dilate, why did not the head enter the pelvis? To revise the facts, vaginal examination before labour revealed a good sized pelvis, the head could be pushed into the pelvis from above, there was no overlapping, no evidence of disproportion was found at operation; the child was rather small, the patient had had sufficient good pains to effect, under normal circumstances, a spontaneous delivery, and she was given a sufficiently long trial of labour. In truth, the above findings read like a list of prerequisites to a normal delivery, but in seventy odd hours no progress had been made.

The clue to the solution will be found to lie in, firstly, the continuous complaint of severe pain even though contractions of the uterus were moderate in strength. Secondly, the severe tenderness over the lower uterine segment. Thirdly, the varying strength of the contractions. Fourthly, the relation between pain complained of, and the contraction felt. In contrast to the normal the patient felt pain before the contractions began and experienced pain after the contractions had disappeared.

All these factors point to some anomaly of the uterine powers of contraction. Of these, there are many; the pains may be too weak, too strong, too often, too infrequent, the relation between contracting and non-contracting portion of the uterus may become abnormal, various types of constriction rings may develop in various locations, the uterus may go into tetanic spasm, etc.

In the case under discussion the anomaly of contracting powers seems to belong to the class in which the normal relation between contracting and non contracting portions of the uterus are disturbed.

Normally, Bandl's retraction ring divides the uterus into an active upper contracting and lower passive dilating part. Below Bandl's ring are the cervix and lower uterine segment, above it, the rest of the uterus. During normal labour, the passive portion becomes effaced, dilates and is retracted upward over the presenting part by the actively contracting upper segment, until eventually dilatation and retraction are complete and the contracting portion of the uterus is able to force the presenting part down, unimpeded by the lower uterine segment and cervix.

In the above case, instead of a lower passive and upper active segment, the uterus contracted as a whole. Upper and lower segment and cervix con-

tracted together, so that no progress in dilatation of cervix and advance of presenting part could occur. Academically, this may be classed as myoclonia uteri (cramp pains) which is in the group known as dysergism (irregular contractions) uteri. Concerning the possibility of actual contraction of the cervix, there are some authorities that deny the existence of muscle fibres around the external os at term, but there are definite cases on record of actual contraction of the cervix. Most cases of so-called "rigid os" are really the result of improper contraction of the uterus.

The dangers in cases of this sort are both to mother and child; to the former, physical exhaustion in which debilitated condition the operative conditions necessary may well send the patient down the long treacherous road of puerperal infection. Nervous exhaustion may occur which may lead to delirium. To the child there is danger of death from asphyxia and injury.

Sedation, physical support and a sympathetic explanation to the patient are the mainstays of treatment. The contractions may in time become normal. Forceps may be used where conditions warrant and there are no contra-indications e.g. if sufficient progress has been made and the cervix is fully or almost fully dilated. In the case described above, Caesarean section was felt to be the most intelligent treatment.

Case No. 2. M. L. a 23 year old coloured primipara, due on September 16th, was admitted to Dr. Atlee's service at the Grace Hospital in labour, on September 20th. She had attended the Dalhousie Pre-natal Clinic regularly with normal findings throughout the pregnancy. The general physical examination revealed nothing abnormal.

External pelvic examination showed the following measurements; interspinous 23.5 cms., intercrystal 24 cms. external conjugate 15.5 cms. and the outlet measured 7.5-8 cms. Of course, external measurements per se have not a great deal of significance, but on vaginal examination the promontory was felt and the diagonal conjugate measured about 10 cms. The diagnosis was made of a justo minor pelvis very close to normal, but with a sacrum which seemed flattened to some extent.

Examination after admission showed the position of the baby to be L. O. P. with the head engaged, being one cm. above the level of the ischial spines. The cervix was fairly thick and admitted about three fingers (rectal examination). Labour had started at 5 p.m. on September 20th, and at this time, 1 a.m. September 21st, the contractions were fairly strong, coming about every 5-7 minutes. The patient complained severely of the pain and Heroin was administered p.v.m.

Throughout September 21st, the contractions continued to occur every 5 minutes, and were of good quality. Repeated rectal examination failed to reveal any significant advance. True, the cervix was thinning, but it was not dilating to any great extent. At 6.40 p.m. the head was at the spines, with the cervix slightly more open than on previous examination. The position of the baby was still L. O. P. and the foetal heart sounds were good.

Throughout labour, the patient was well supported with nourishment, and Heroin and Nembutal were given to insure proper rest. No signs of exhaustion were evident and it was felt that once the head was rotated to an anterior position, the cervix would dilate and delivery occur. Consequently, it was decided to allow a further trial of labour.

On September 22nd. despite continued good pains, there was no significant progress and a sterile vaginal examination was decided upon to check up on

the situation and decide on the proper line of treatment. This examination, at 5 p.m. showed the head in an L. O. P. position, with the chin about 30'' posterior. The cervix was fully effaced but only about one-third dilated, and it was flapping loosely about the head; e.g. the head did not fit the cervix well.

There were two active courses of treatment possible under these conditions; Caesarean section or forceps delivery from below. Throughout the conduct of the case nothing had been done to contra-indicate Caesarean section, which had been considered as a possible eventuality. However, since vaginal examination gave the impression to the examiner that there was sufficient room for the head to come through without too much difficulty, the latter course of action was decided upon.

To overcome the incomplete dilatation of the cervix so that forceps could be applied, Dührssen's incisions were made at points corresponding to 10-2-6 o'clock, and extending up to the vaginal fornices. Forceps were then applied and the Melhado manoeuvre performed, and a living female child was delivered in the occipito-anterior position. Very little difficulty was encountered in the forceps extraction even though the child was not small; weight 7 lbs. 2 $\frac{3}{4}$ oz. The cervix was repaired with a No. 2 chromic catgut. An uneventful recovery followed and the patient was discharged on the tenth day post partum.

As to the advisability of repairing the cervix after Dührssen's incisions opinion is divided. Some authorities hold that good healing will occur without sutures and that their use serves no other purpose than to introduce a foreign body. This idea was borne out in the case under discussion where most of the sutures were found to have broken down on the tenth day. Of course, where bleeding from the cervix is profuse, the use of sutures is indicated, but bleeding will not occur if the cervix is thoroughly effaced, which should be the case before Dührssen's incisions are employed.

This brings to mind some of the dangers in the use of Dührssen's incisions. As mentioned above, one is bleeding. If effacement of the cervix is not complete, the uterine vessels are not retracted and there is consequently great danger of severe haemorrhage from injury to these vessels. If too forceful extraction is employed, the cuts may extend beyond the fornices, into the broad ligament, and even into the peritoneal cavity. For this reason, the delivery must be performed very gently.

Concerning indications for Dührssen's incisions, one naturally is the condition described in the above case; viz. occipito-anterior positions where complete cervical dilatation does not occur because of the poor fit of the head to the cervix, and the application of forceps is required. This also applies to other than posterior positions, although the poor fit of the head to the cervix is much less likely to occur. Danger to mother or child where the only factor delaying delivery is dilatation of the cervix constitutes another class of indication. Rigid cervix scars are other occasional indications.

It is interesting to note that future pregnancy is not affected where Dührssen's incisions have been done (Hunt and McGee). Subsequent labours are delayed in only 4% of cases. In fact, dilatation is usually facilitated after Dührssen's incisions have been used.

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The above excellent case reports were prepared by my interne Mr. H. Goldberg, and I couldn't have done them any better myself.

H. B. ATLEE, M.D., Halifax, N. S.

Malignant Tumour of Kidney.

M. M. age five years was seen in consultation October 16th, 1939. Two weeks before this she had an attack of abdominal pain with nausea and vomiting and the parents noticed for the first time swelling on the right side of her body which has since appeared to increase in size. The swelling caused no discomfort and the patient was not incapacitated. Examination presented a well nourished, perfectly healthy looking child—weighing forty pounds and with all systems apparently normal. Repeated urinalysis routine and microscopic failed to show any deviation from normal. Abdominal examination revealed a large mass in the upper right quadrant and right loin. The tumour was definitely defined with smooth outline and apparently not adherent to surrounding structures. There was no tenderness or pain elicited on repeated investigation. X-ray films of chest and abdomen were essentially negative, and there was no superficial glandular enlargement.

On October 24th, 1940, a right nephrectomy was performed. Anaesthesia was induced by chloroform and ether. Owing to the size of the tumour the transperitoneal approach was carried out using the T shaped incision. The mass was the size of a very large grapefruit and was easily mobilized only a few adhesions presenting. Thorough abdominal examination failed to discover any metastases.

Convalescence was uneventful and patient was discharged on eleventh post-operative day. In December, 1939, and in June, 1940, the patient was sent to the Victoria General Hospital, Halifax, where high voltage X-ray treatment was given by Dr. S. R. Johnston.

The latest report is that this child is attending school and is apparently in perfect health.

Pathological report on the tumour and comments by Dr. R. P. Smith, Provincial Pathologist, Halifax, N. S.

"The kidney is much enlarged and largely replaced by a yellowish white tumour in which areas of haemorrhage are visible.

Histological examination reveals it to be a malignant blastocytoma or Wilm's tumour of the embryonal adenocarcinoma type rather than the adenomyosarcoma variety.

Various names are given to it, e.g., nephroblastoma, blastocytoma, embryonal adenocarcinoma of the renal blastema, embryonal adenomyosarcoma and Wilm's tumour. In the present case the appearances were more those of the embryonal adenocarcinoma of the renal blastema type, although the sections showed a few abortive glomeruli (shown as a tuft of spindle cells projecting into an invaginated tubule) and some smooth muscle fibres (no striated muscle fibres were seen). The muscle fibres may sometimes make up the bulk of the tumour but did not do so here. There was no actual involvement of the pelvis though the tumor is fairly vascular and hence the absence of haematuria. Such tumours are characterised by their complex embryonal structure, rapid growth to a very large size, fatal course and obscure origin, occurring in the first few years of life. Metastases are relatively late but are found especially in the liver, occasionally in the lungs, etc."

L. M. MORTON, M.D.,
Yarmouth, N. S.

Osteogenic Sarcoma

Male, white child, age 13 years, admitted to hospital on September 21st, 1938, with the following complaints: Pain in right knee joint for past month, being often awakened at night with the pain. When walking, his mother stated he was apt to drag the leg so as to ease the joint. The condition was apparently becoming worse and at times a slight swelling had been noticed. He was beginning to develop such constitutional symptoms as loss of weight and appetite.

Examination revealed a fairly well developed boy of stated age, who apparently had lost some weight recently. There was a slight swelling of right knee, more marked just proximal to the condyles of the femur and very tender to touch especially on the medial side, and definitely warmer than its corresponding fellow joint. There was no limitation of movement. Temperature on admission was 100 degrees, but as this dropped to normal the following day, it is insignificant. Leucocyte count of 15,000—80% of which were polymorphs. At this time a tentative diagnosis of osteomyelitis was made.

The X-ray report of September 24, 1938, was as follows:

"There is evidence of irregularity and destruction of the metaphysis of the femur extending throughout the whole bone and a limited area of complete destruction of the anterior surface just proximal to the tibia. There is no periosteal elevation. Comment: Two conditions must be borne in mind—(1) osteomyelitis (2) osteolytic sarcoma. Due to the absence of periosteal reaction this is probably an osteomyelitis but would suggest that the small swelling near the patella be explored. The condition does not suggest tuberculosis."

Thereupon it was decided to do a biopsy, although the dangers of such a procedure were fully realized in the event of the case being one of the osteogenic sarcoma, yet the attending doctors did not feel justified in subjecting the child to such radical treatment as high amputation without more proof of malignancy. Accordingly on September 25th, the lower end of the femur was curetted, large portion of necrosed bone scraped away and a specimen sent for microscopic examination. The following report was received on October 6th, 1938:

"I can detect no pus or other acute inflammatory cells. The cells are large round, oval or spindle shaped, with some large multinucleated giant cells and a little necrosis present as well. I regard the condition as an osteolytic type of osteogenic sarcoma, rather than an osteomyelitis."

The limb was X-rayed again on October 17th, 1938, and this time the report was confirmatory of the histological analysis and it is very interesting, in that it brings out the rapidity of development of such tumors, i.e. "This is a typical picture of osteogenic sarcoma. The prognosis is practically hopeless, even with the most radical treatment."

On October 25th, high flap amputation of the right femur was carried out. The patient made an uneventful recovery and was discharged to his home on November 14th, after being hospitalized 54 days, flap well healed, and child in good health. It should be noted that an X-ray of his lungs before his discharge from the hospital and again recently showed no evidence of metastasis.

The average survival period is 20 months for osteogenic sarcoma. At this date, it is slightly over 2 years since operation was performed, and the child is apparently quite well, with no evidence of metastases, or other diseases.

I would like to thank Mr. W. E. Callaghan, my interne, for helping me prepare this report.

M. G. TOMPKINS, M.D.,
Dominion, N. S.

Ovarian Cyst with Twisted Pedicle.

Name: Mrs. R. McK., Nativity: Canadian. Sex: Female.

Address: 256 Whitney Avenue. Color: White. Admitted: Sept. 19th, 1940.

Discharged: October 12th, 1940. Age: 73 years.

Complaints: Discomfort in abdomen. Nausea.

Family History: Mother died at 29 of Tb. Father died at 74—Hypertension. No history of diabetes or cancer.

Personal History: O. D. C. with good recovery. Previous health good.

Present Illness: About one year prior to admission patient began suffering from attacks of abdominal discomfort. She had a feeling of soreness over whole abdomen which would after a variable period of time settle in the right lower quadrant. Through all this she felt extremely nauseated. Sometimes would vomit. These attacks had no relation to meals or to any type of food eaten. With the last attack the patient suffered a very severe attack of abdominal pain requiring morphia for relief and for the first time experienced a "bearing down" sensation.

Physical Exam: Shows nothing abnormal per abdomen. There is however a mass felt per rectum in the pouch of Douglas. It is not moveable and is about the size of a plum, hard and tender.

Menstrual History: Menstruation started at 13 years and periods have always been regular in time and amount of flow. Menopause at 45 and no bleeding since. Patient has had one pregnancy and the child is living and well.

Systemic Inquiry: Head and neck: No headaches, vision good with glasses. No symptoms referable to this system. Cardio-vascular: No dyspnoea, palpitation, precordial pain. Respiratory: No cough, expectoration, night sweats or loss of weight. Alimentary: Is inclined towards constipation and takes mineral oil regularly for the past year. G. U.: Had nocturnal polyuria sometimes. There are no symptoms referable to this system.

Urinalysis: Sept. 20th. Color, light amber. React., Alk. Sp. Gr., 1010. Sed., clear. Alb., 0. Sug., 0. Micros., Occ. pus cells and epith cells.

Preoperative diagnosis: Ovarian tumor with twisted pedicle.

Operation Chart: Sept. 21st.

Mid line lower abdominal incision, peritoneal cavity opened and pelvis explored, small intestines matted down in the pouch of Douglas over an ovarian cyst the size of a small apple which had become twisted on its pedicle

the right fallopian tube. The cyst was bound down by recent adhesions which were easily separated with the fingers so that it was freed and delivered, pedicle was clamped and doubly ligated. Uterus contained two small sub-peritoneal fibroid nodules which were enucleated through a small incision which was closed by continuous sutures. The remains of right tube were allowed to fall in the raw area of the pouch of Douglas to prevent the small intestines becoming adherent, abdomen closed in layers without drainage.

Pathological Report: *Tissue*—ovarian cyst.

The histological appearances here have the characters of two corpora albicantes of the ovary showing hyaline fibrous change. I can detect no evidence of cystic change, calcification or of malignancy.

The gross and histological appearances here are those of a simple ovarian cyst with torsion and haemorrhage into its wall. The fallopian tube shows no special change. I can detect no evidence of malignancy in the tissue.

Further sections however show calcification and true bone formation as well in the fibrosed corpora albicantes. They show no gross or histological evidence of malignancy.

Progress Notes:

Sept. 19th. Patient admitted for Dr. Sodero. Nembutal cap. for sleep.

Sept. 20th. S. S. enema given with good result.
B. P. 160/90.

Sept. 21st. Patient made ready for O. R. Morph. grs. 1/4, atrop. 1/150 given before going to O. R. Returned from O. R. condition good. Vomited small amount greenish fluid. Morph. grs. $\frac{1}{4}$ and atrop. grs. 1/150 for pain. Voided.

Sept. 22nd. Complained of considerable pain in abdomen. Cod. given, with no relief. Morph. grs. 1/8 given with relief. Liquid diet. Fairly comfortable day.

Sept. 23rd. S. S. enema given with good result. Liquid diet. Fairly comfortable day.

Sept. 25th. Dr. Sodero visited and changed dressing. Clips removed. Bed exercise taken.

Sept. 28th. Silkworm sutures removed by Dr. Sodero. Incision clean and dry. Comfortable day.

Oct. 1st. Comfortable day.

Oct. 4th. Fairly comfortable day.

Oct. 8th. Patient up in chair for 1/2 hour. No fatigue. Comfortable day.

Oct. 11th. Comfortable day. Temperature, normal.

Oct. 12th. Discharged.

Ovarian cyst with twisted pedicle (Diagnosis).

J. J. ROY, M.D.,
Sydney, N. S.

Secondary Syphilis. Infectious Mononucleosis.

Name: G. N. Nativity: Norwegian. Color: White.

Age: 38 years. Address: S. S. Tovelil. Sex: Male.

Occupation: Sailor. Admitted: Aug. 25th. Discharged: Sept. 27th, 1940.

Complaint: Chills followed by sweating. Headache.

Family History: Father died age 72. Mother living and well. No history of heart, kidney or chest disease, diabetes or cancer.

Personal History: O. D. C. with good recovery. Previous health very good.

Present Illness: Patient was on board ship five days after leaving Central America, when he began feeling very weak. Could barely walk. Got into bed for few days and felt better but when started to work, this same feeling of weakness came on him. This time he also had chills followed by high pyrexia. Temp. went as high as 106° F. This seemed to occur on alternating days. Together with the pyrexia patient complained of severe frontal headache.

Urine:

Date: Aug. 29th. Color: Dark amber. React: Acid. Sp. Gr.: 1022. Sediment: Clear. Alb.: Trace. Sug.: 0. Micros: Several pus cells.

Blood:

Sept. 17th. Neut., 55%. Eosin, 0. Baso., 1%. Small Monos., 43%. Large Monos., 1%.

Wassermann—Kahn test Positive (Two Plus).

Report on Widal Agglutination Test.

B. typhosus.....	Negative.
B. paratyphosus A.....	"
B. paratyphosus B.....	"
Br. abortus.....	"
Br. melitensis.....	"
B. proteus X, 19.....	"

Pathological Laboratory—Report on blood film.

Result of examination

The Red Cells: show some achromia and a little microcytosis and poikilocytosis. No polychromasia, malarial parasites or nucleated red cells seen.

The White Cells: No abnormal monocytes indicative of Infectious Mononucleosis.

Differential Schilling Count (200 cells counted).

Myelocytes.....	0.0%
Juveniles.....	0.5%
Band Forms.....	3.5%
Segmented Polymorphs.....	40.5%
Lymphocytes.....	46.0%
Large Mononuclears.....	7.5%
Eosinophils.....	2.0%
Basophils.....	0.0%

Remarks: There is a very slight degree of hypochromic microcytic or secondary anaemia with a slight relative lymphocytosis present. The appearances of the films are not characteristic enough to warrant a diagnosis of Infectious Mononucleosis. However I am trying to get sheep cells and will do the agglutination test as requested which should settle the matter definitely. I shall report again in due course.

Progress Notes:

- Aug. 25/40 Patient admitted to Ward XII for Typhoid or Malaria precautions. Temp. 98.2. Pulse 104. Resp. 24.
- Aug. 26th Comfortable day. Liquid diet.
- Aug. 28th. Comfortable day. Temperature normal.
- Aug. 30th. Comfortable day. Temperature normal.
- Sept. 2nd. Comfortable day. House diet. Appetite good.
- Sept. 3rd. Patient states he is very warm, perspiring freely, salversan .60 gms. given. T. 105 P. 116: R. 24.
- Sept. 4th. Patient states he feels better this morning. T. 99.8 P. 90: R.20.
- Sept. 7th. Comfortable day. Temperature normal.
- Sept. 10th. Patient up around ward. Comfortable day.
- Sept. 11th. Salversan .60 gms. Comfortable day.
- Sept. 14th. Comfortable day.
- Sept. 16th. Comfortable day.
- Sept. 20th. Comfortable day. Usual treatment.
- Sept. 24th. Comfortable day.
- Sept. 27th. Comfortable day. .60 gms. given. Discharged.

Diagnosis: Secondary syphilis? Infectious Mononucleosis?

P.S. Later report of agglutination test with sheep's cells, negative.

J. J. Roy, M.D.,
Sydney, N. S.

The School Child's Breakfast

Many a child is scolded for dullness when he should be treated for undernourishment. In hundreds of homes a "continental" breakfast of a roll and coffee is the rule. If, day after day, a child breaks the night's fast of twelve hours on this scant fare, small wonder that he is listless, nervous, or stupid at school. A happy solution to the problem is Pablum (Mead's Cereal cooked and dried). Six times richer than fluid milk in calcium, ten times higher than spinach in iron, containing vitamins B¹ and G, Pablum furnishes protective factors especially needed by the school-child. The ease with which Pablum can be prepared enlists the mother's co-operation in serving a nutritious breakfast. This palatable cereal requires no further cooking and can be prepared simply by adding milk or water of any desired temperature.

Dominion Income Tax Returns

BY MEMBERS OF THE MEDICAL PROFESSION

As a matter of guidance to the medical profession and to bring about a greater uniformity in the data to be furnished to the Income Tax Division of the Department of National Revenue in the annual Income Tax Returns to be filed, the following matters are set out:—

INCOME

1. There should be maintained by the Doctor an accurate record of income received, both as fees from his profession and by way of investment income. The record should be clear and capable of being readily checked against the return filed. It may be maintained on cards or in books kept for the purposes.

EXPENSES

2. Under the heading of expenses the following accounts should be maintained and records kept available for checking purposes in support of charges made:

- (a) Medical, surgical and like supplies;
- (b) Office help, nurse, maid and book-keeper; laundry and malpractice insurance premiums. (It is to be noted that the Income War Tax Act does not allow as a deduction a salary paid by a husband to a wife or vice versa. Such amount if paid, is to be added back to the income);
- (c) telephone expenses;
- (d) Assistants' fees;
The names and addresses of the assistants to whom fees are paid should be furnished. This information is to be given each year on or before the last day of February on Income Tax Form known as Form T.4, obtainable from the Inspector of Income Tax. (Do not confuse with individual return of income, Form T.1, to be filed on or before 30th April in each year);
- (e) Rentals paid;
The name and address of the owner (Preferably) or agent of the rented premises should be furnished (see (j));
- (f) Postage and stationery;
- (g) Depreciation on medical equipment;
The following rates will be allowed provided the total depreciation already charged off has not already extinguished the asset value;—

Instruments—Instruments costing \$50. or under may be taken as an expense and charged off in the year of purchase;

Instruments costing over \$50. are not to be charged off as an expense in the year of purchase but are to be capitalized and charged off rateably over the estimated life of the instrument at depreciation

rates of 15 per cent to 25 per cent, as may be determined between the practitioner and the Division according to the character of the instrument, but whatever rate is determined upon will be consistently adhered to;

Library—The cost of new books will be allowed as a charge.

Office furniture and fixtures—10 per cent per annum.

(h) Depreciation on motor cars on cost;

Twenty per cent 1st year;

Twenty per cent 2nd year;

Twenty per cent 3rd year;

Twenty per cent 4th year;

Twenty per cent 5th year;

For 1940 and subsequent years the maximum cost of motor car on which depreciation will be allowed is \$1500.

The allowance is restricted to the car used in professional practice and does not apply to cars for personal use.

(i) Automobile Expense; (one car)

This account will include cost of licence, oil, gasoline, grease, insurance, washing, garage charges and repairs; (Alternative to (h) and (i) for 1940 and subsequent years—In lieu of all the foregoing expenses including depreciation there may be allowed a charge of $4\frac{1}{2}$ c. a mile for mileage covered in the performance of professional duties. Where the car is not used solely for the purpose of earning income the maximum mileage which will be admitted as pertaining to the earning of income will be 75% of total mileage for the year under consideration.

For 1940 and subsequent years where a chauffeur is employed partly for business purposes, and partly for private purposes, only such proportion of the remuneration of the chauffeur shall be allowed as pertains to the earning of income.

(j) Proportional expenses of doctors practising from their residence—

(a) owned by the doctor;

(b) rented by the doctor;

(a) Where a doctor practises from a house which he owns and as well resides in, a proportionate allowance of house expenses will be given for the study, laboratory, office and waiting room space, on the basis that this space bears to the total space of the residence. The charges cover taxes, light, heat, insurance, repairs, depreciation and interest on mortgage (name and address of mortgagee to be stated);

(b) Rented premises—The rent only will be apportioned inasmuch as the owner of the premises takes care of all other expenses.

The above allowances will not exceed one-third of the total house expenses or rental unless it can be shown that a greater allowance should be made for professional purposes.

(k) Sundry expenses (not otherwise classified)—

The expenses charged to this account shall be capable of analysis and supported by records.

Claims for donations paid to charitable organizations will be allowed up to 10 per cent of the net income and for patriotic donations up to 50% of the net income both upon submission of receipts to the Inspector of Income Tax.

The annual dues paid to governing bodies under which authority to practise is issued and membership association fees not exceeding \$100. to be recorded on the return, will be admitted as a charge.

The cost of attending post-graduate courses or medical conventions will not be allowed.

(l) Carrying charges;

The charges for interest paid on money borrowed against securities pledged as collateral security may only be charged against the income from investments and not against professional income.

(m) Business tax will be allowed as an expense but Dominion, Provincial or Municipal income tax will not be allowed.

Professional Men Under Salary Contract

- (3) For 1939 and subsequent years the salary of professional men will be taxed in full without any deductions other than those specified in the Income War Tax Act such as charitable and patriotic donations and payments to superannuation or pension funds. In particular, the cost of operating an automobile, including depreciation thereon, and the annual fees paid to governing bodies will not be allowed.

Squibb Offers Pyridoxine in Microcaps and Solution

Pyridoxine Hydrochloride (the hydrochloride of pure synthetic vitamin B⁶) is now being supplied by E. R. Squibb & Sons, Toronto, in two forms—Microcaps (miniature capsules) for oral administration containing 1 mg. and 10 mg. each, and aqueous Solution for parenteral administration, containing 25 mg. per cc.

Indications for Pyridoxine therapy are not well established as yet, but they include vitamin B⁶ deficiency conditions complicating pellagra, beri-beri, and other nutritional deficiency states. Limited clinical investigation suggests the use of Pyridoxine in the treatment of paralysis agitans (Parkinson's syndrome), myasthenia gravis and pseudohypertrophic muscular dystrophy.

Solution Pyridoxine Hydrochloride Squibb may be given by the subcutaneous, intramuscular or intravenous route; the Microcaps are administered orally. The suggested prophylactic dose is 1 to 5 milligrams daily by mouth. The therapeutic dose suggested is 10 to 50 milligrams daily, preferably by a parenteral route.

One mg. Microcaps are supplied in vials of 50, and 10 mg. in boxes of 20. The Solution comes in 5-cc. rubber-capped vials containing 25 mg. Pyridoxine Hydrochloride per 1 cc., preserved with 0.5 per cent chlorobutanol.

The Impermeable Dressing*

Infected hands are best splinted, although at a certain stage active movements of fingers are to be encouraged, certainly much earlier than is usually the practice. The character of dressings is made much play of; great insistence is laid on baths and what is put in them, also their temperature, on fomentations, and on the aid of Bier's passive hyperaemia. *The truth is that everything depends on the correct surgical procedure; after that has been done the hand will up to a point take care of itself.* I would, however, bring to notice what I consider the most convenient, comfortable and efficient method of dressing infected hands and fingers.

We all must long ago have concluded that the virtue in fomentation, whatever it might be, could scarcely consist in the momentary contact of scalding lint with the skin any more than in the highly potent boric acid with which it is charged! Its value must lie in the effectiveness of the dressing in securing moisture, for this alone among dressings is given a covering of impermeable material. In further investigation of this point I carried the matter to the test of complete air-sealing of hands in jaconet or rubber bags and dispensing with any dressing or heat application. Such hands, even if normal, rapidly become covered with moisture exuded through the skin, which after a few hours acquires the sodden appearance seen after bath immersion. Incisions exude serum and pus freely. The practical application is obvious; all the effects of fomentation, baths and so on are to be obtained without repeated dressings simply by the method of moist gauze dressings applied over the incisions merely for the purpose of convenience of absorption. The antiseptic, if any, does not matter. The hand is placed in a loose stitched jaconet bag fixed at the wrist by an elastic band, a generous wool encasement is applied to prevent loss of heat (and so vaso-constriction) and for comfort, and then splinting from elbow to fingers is applied. Daily dressings are ample, and the method is particularly suitable for out-patient treatment.

In the fingers a similar effect is produced by application of a very copious mass of soft paraffin—again it is the moisture-seal that is effective. Possibly the value of the Winnett-Orr method actually lies in such a seal. In a cellulitic drained area the total effect is a passage to the exterior of fluid from the part, some through any incision, some directly through the skin by various routes, so that the fluid infiltration in the zone is constantly being replaced from the blood-stream while the excretory process is going on. The value, therefore, is to be visualized as a persistent flushing of the area from the blood-stream, in addition to absorption into lymphatics and veins that may be going on (lymphatics as a rule are blocked early).

While this method of dressing is here recommended for adoption *ab initio* in the treatment of hand infections, its effects are nowhere so strikingly seen as in cases previously treated by prolonged immersion, in water-baths for instance. Here the swollen, sodden member "shrinks wisely", to invert Mr. Weller's phrase, within a day or so of the change of treatment.

*Part of an address entitled Minor Surgery: Some Principles and some Practices by C. Jennings Marshall, M.S., M.D., F.R.C.S., Surgeon to Charing Cross Hospital, London, and published in *The Clinical Journal*, June, 1936, Vol. LXV. No. 6, page 221.

Society Meetings

The annual Fall meeting of the Western Nova Scotia Medical Society was held at the Grand Hotel, Thursday, November 28th, with the President, Dr. P. E. Belliveau of Meteghan presiding. About twenty physicians were present, among them being Dr. A. B. Campbell of Bear River, President of the Medical Society of Nova Scotia.

Following the customary dinner, two scientific papers were presented. The first was by Dr. J. S. Robertson of Yarmouth, Divisional Medical Health Officer, whose subject was the value and significance of the Schick test for diphtheria. Then Dr. T. A. Lebbetter of Yarmouth spoke on valvular heart disorders. The paper by Dr. D. M. Grant, medical officer at the airport, could not be presented as the entire airport was under quarantine.

OBITUARY

THE BULLETIN extends sympathy to Dr. E. P. Atkinson of Oxford on the death of his wife, Etta May, which occurred on November 10th, after a long illness.

The BULLETIN also extends sympathy to Dr. A. M. Marshall of Halifax on the death of his mother, Mrs. Elizabeth Marshall, widow of Guildford R. Marshall, which occurred on November 26th.

Among those who lost their lives when the converted and armed merchant cruiser *Laurentic* was torpedoed a few weeks ago was Roy McLeod of Bay Roberts, Newfoundland, nephew of Dr. J. K. McLeod, City of Sydney Medical Officer. He joined the naval service at the outbreak of war, serving through the evacuation of British forces from Dunkerque and was a member of the crew on the liner *Laurentic* afterwards. Hopes were held at first that he might have been saved but word was received recently by his sister and brother-in-law at St. John's, that he was posted as missing. A son of the late Dr. Thomas McLeod, who was a native of Sydney, and Mrs. McLeod, he was well known in Sydney which he visited on many occasions. Both his father and mother died several years ago.

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Personal Interest Notes

MAJOR MARION NEILL, Superintendent of the Salvation Army's Grace Hospital at Vancouver for the last four and a half years, has arrived at Halifax to assume a similar position. She succeeds Brigadier M. McAulay who has been transferred to Toronto.

Dr. T. C. C. Sodero, who has been practising at Guysborough for the past four years, has gone to Toronto to take special work in surgery at the General Hospital. His practice has been taken over by Dr. Edwin D. Levittan who graduated in May, and has since been in Newfoundland.

Dr. M. J. Wardrope of Springhill was a recent visitor in Halifax. He reported general conditions in the Cumberland mining towns as good, stating that the local collieries have been working steadily all summer.

Dr. F. J. Melanson of Eel Brook received extensive damage to his car on November 27th when he collided with a car operated by H. E. Killam of Bridgewater on the main highway at Tusket corner, just this side of Tusket bridge. Dr. Melanson's car suddenly skidded on the icy highway, and the running boards and mudguards on the left hand side of both cars were badly crumpled. Fortunately no one was injured in the crash.

Many Nova Scotia Towns Holding Immunization Clinics.

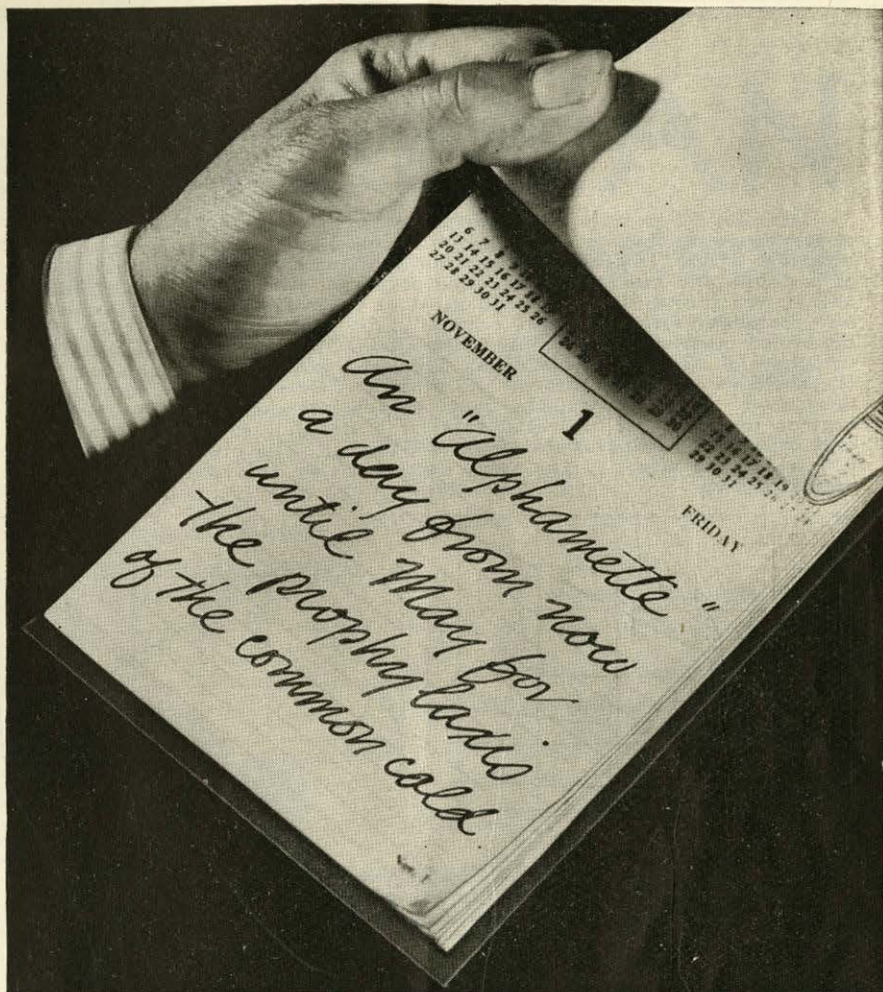
Immunization clinics for protection against diphtheria are being conducted at Yarmouth under the direction of Dr. J. A. Webster, at Pictou under the direction of Dr. M. R. Young and Dr. G. A. Dunn, and we understand clinics are also being established at New Glasgow, Stellarton, Westville and Trenton. Clinics are also being conducted at Springhill under the direction of Dr. R. R. Withrow and at Hantsport under the direction of Dr. G. K. Smith and Dr. F. R. Shankel.

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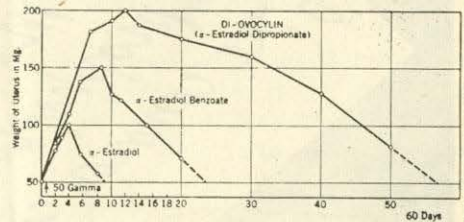
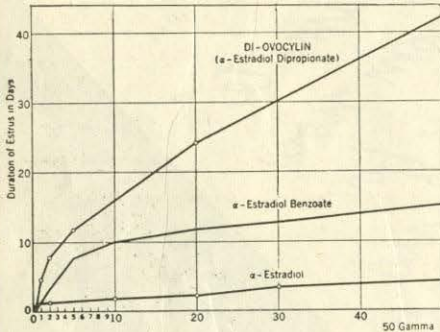
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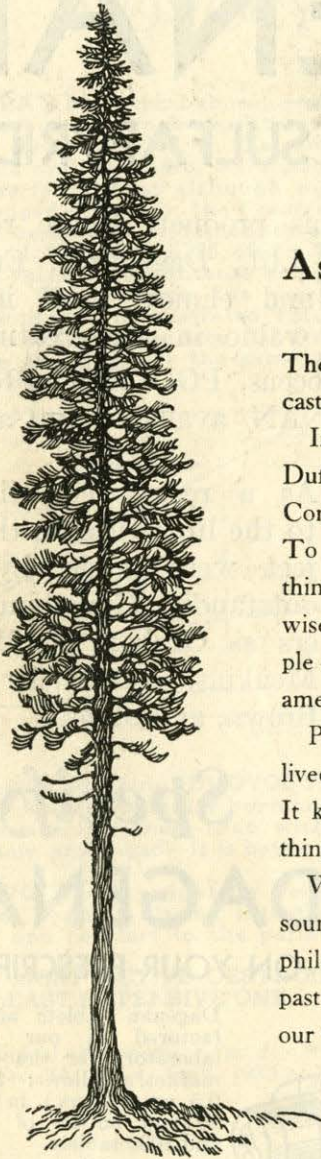
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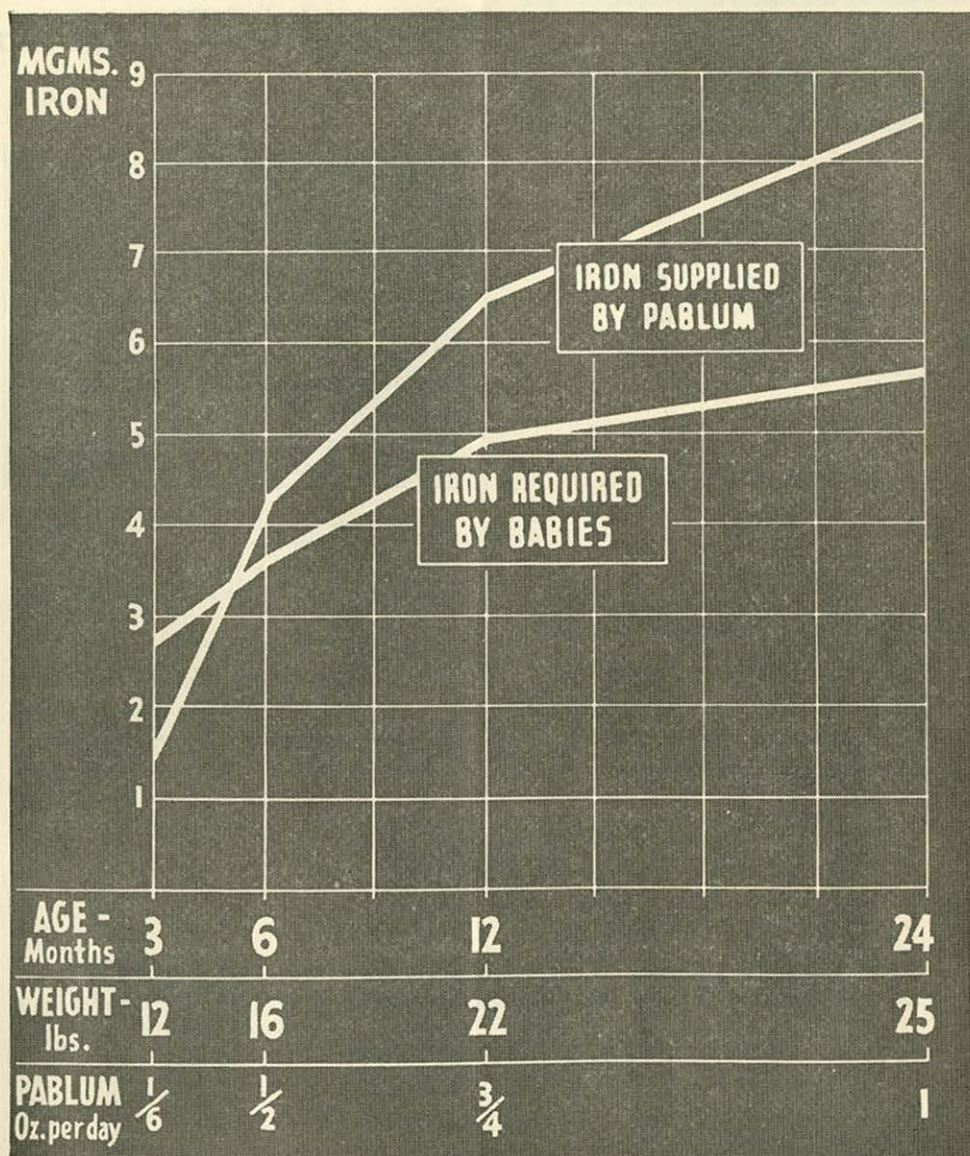
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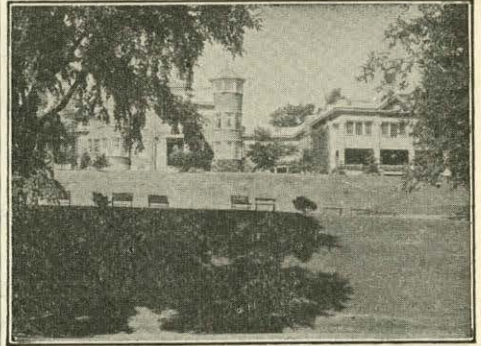


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