Six Surgery Cases

- Neurological
- General
- General
- Abdominal
- Abdominal
- Gynecological

Submitted for

Patterson Prize in Clinical Surgery

2nd June 1948

Rosmary H. B. Dunn
84 Braid Road, Edinburgh 10
CASE I.

Miss Christie Ruggle

RAYNAUD'S DISEASE.

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\begin{align*}
\text{Admitted} & \quad 19. 4. 46. \\
\text{Discharged} & \quad 18. 5. 46. \\
\end{align*}
\]
Name: Miss Christie Russell
Age: 38 yrs.
Occupation: Shopkeeper, Newsagent and Tobaccoist
Address: 61 Blythill Terrace
Edinburgh 8.
Birthplace: Edinburgh
Date admitted: 19.4.46
Recommended by Dr. S. Hackett, Surgeon R.G. Edinburgh

Complaint: Chilblains.

History: For as long as the patient can remember she has suffered from chilblains. They are not marked during the winter but appear as every spell of cold weather. Cold is always the precipitating factor, and is the only precipitating factor. Even bathing in cold water in the summer is sufficient to bring on an attack. The chilblains start as little red itchy spots which get larger and become scpy in appearance. They cause a considerable amount of swelling, and this prevents her from wearing a slip or even gloves which would normally have suited her. Sometimes he skin over the chilblains cracks, and occasionally, here is suppuration.

As a girl, the chilblains troubled her mainly on her feet — on her toes and the back of her heels. They burst if she didn't treat them with great care. At the beginning of this year, she started to wear fur-lined boots, since which time she has had very few chilblains on her feet. Also, she finds that her feet are better when she is taking a lot of exercise, particularly walking.

For 20 yrs she has had them on her hands mainly on the back of her fingers, particularly the index fingers. The thumbs are seldom affected. During this time her chilblains have not been getting worse, but they...
have had more readily during the past five years. This she says is because she has not been able to get rubber gloves, which she previously wore to protect her hands when working with water. Once when it was very cold, the patient noticed that her children disappeared completely.

On questioning:—The patient states that her hands are never hot, and that they do not feel cold even in a draught which causes this. Bluiness always precedes the chilliness. She first notices the color change on the back of her fingers, but has not noticed blisters or redness. Her fingers do not turn white. She has never had any lip skin, membranes or pain either in her hands or feet; nor has she noticed any increase in sweating of her hands. When she has cut her hand during severe cold, the blood flows easily, but is very dark red, and coagulates quickly.

There are no symptoms referable to the urinary system. She has never noticed any change in color of her urine.

A:—No complaints. No cold, if severe enough is sufficient to bring on a bilious attack with vomiting.

Treatment: Apart from the local treatment of dressings applied to broken chilblains, the patient has received calcium nearly all her life. She has had a course of ultraviolet therapy, and some electrical therapy. None of these has done her any good.

Past History: She suffers from tuberculous glands. They spring up periodically—lately every spring, but previously, there were years of quiescence. Some of the cervical ones were excised when she was a child. The others are just...
Does she smoke? - the Keeper -
Tessen's crip - is involved.
And I'm a faded - wear,"
lanced as come up. These swellings are not painful and do not trouble the patient in any way.

History. The patient lives with her mother and sister; under fairly good economic circumstances. The mother is being treated for a duodenal ulcer. The father died of pneumonia. She has a brother and sister, both in perfect health. Occasionally the mother suffers from chilblains. The brother used to have them when he was young.

Amination. 20.4.46

A well built, healthy-looking woman. She is very cooperative.

Hands. The patient is not suffering from chilblains at present. There is slight cyanosis of both hands. The pinkish-purple scars of old chilblains can be seen on the dorsum of the fingers, and particularly on the radial aspect of both index fingers.

The skin over both hands is loose, and of normal texture, and there is normal amount of perspiration.

There is no muscular wasting.

Nails are sunken and brittle.

Epidermis, sensibility is a little impaired, particularly as regards temperature.

When the hand was placed in cold water for a few min. the backs of the fingers turned bluish blue. As compared with other hands this was abnormal.

Feet: The feet are warm. White, scaliness of chilblains over 2. tendo Achilles.

C. V. S.: There is slight varicosity at upper end of s. humeri.

Heart. 6th rib midclavicular line
Sounds closed in all areas.
2nd sound accentuated in aortic + pulm. areas.
BP 110 mm Hg. Pulse 78/min.
Force: R: dull, a weak pulse wave. Q: well sustained.
Vessel walls not palpable

Chest:
Upper lobe N.A.D.

C.N.S.:
Pupils react equally to light.
Blink jerks.
Knee jerks.
Plantar flexor: No reflex.
Triceps.

Exophath:
Cervical: Hard glands palpable in Post. Cerv. triangle particularly marked are the submandibular glands.
There is swelling of neck on both sides, on the suprasternal notch.
Subclavian: Palpable but not enlarged.
Gastrocnemius: Not palpable.

P.S.:
N.A.D.
No symptoms. Bowels regular.

Diagnosis:
21.4.46. Raynaud's Disease.

X-ray. Torso. Numerous calcified glands in neck on both sides and in axillae. There are also calcified nodes in both lungs. There is no evidence of recent disease.

For operation: Sternotomy.

Hb 58%.
WBC. 10,400. / ? (i:1 mm).
BP. 110/75. / ? (mm Hg).

Op.: Omia 1/3 g.
Hemorrhage 1/300.
The patient was placed on his R side.

A paramedian paravertebral incision was made from L4 to the 4th cervical to the 4th thoracic spine just lateral to the origins of the sympathetic rami. The fascia covering the rami was exposed, and the tendinous attachment of the rami were divided; also divided were the interspinals, vertebrae posterior superior, costotransverse. These muscles were retracted laterally, while sacrospinalis was retracted medially. Vessels were clamped, coagulated. The transverse processes were not freed. The 2nd rib was identified. Its periosteum

was raised from origin to apex, just lateral to the tip of the transverse process. The pleura was then pushed forwards and laterally. There was a little difficulty here because of some adhesions. The 2nd rib was then divided at the lateral point of the vertebral column. The neck was nibbled away with bone forceps, and in the same manner the transverse process was cut across at its junction with the vertebral arch.

Part of the 2nd intercostal (left) muscle was removed with the transverse process.

The 3rd nerve was exposed and isolated with a tape. After removal of the 2nd rib, the 2nd intercostal nerve was exposed, isolated. All cut ends of bone were then sealed with wax.

Intercostal vessels were clamped, cauterised. Then the sympathetic chain was seen lying anterior to the radicular branches at the level of the rib. It was grasped at the level of the 3rd paravertebral, and divided just below this point.

The while grey rami communicantes between:
2nd. 3rd nerves. The ganglia were divided. Then the sacral was put in the upper free end, the 3rd sacral ganglia was exposed. This free upper end of the chain was attached with the neck muscles to prevent regeneration & communication with the lower end.

Next, the anterior & posterior rami of the 2nd & 3rd ilio-costal nerves were divided as they emerged from the ilio-vertebral foramina. The tails were packed with Esq. ilio-costal muscle.

Both nerves were then retracted about 4 cm distal to this point.

Leaving in the wound a temporary catheter with nucleus, the muscles were closed in layers - with collagen & silk sutures. 5 deep Kaino sutures were put in. The catheter was removed. The skin edges were approximated with silk, followed with interrupted silk wound put. An anchor dressing was put in position.

Summary. Left cervico-thoracic preganglionic section.

Preganglionic sectioning.

PRESS NOTES.

23.4.46. Sophia p.p. 16. 9.5 am.

Patient looks quite well. She is comfortable. E heavier, q. p. in the wound. Temp. pulse, resp. all up a little. The most striking change is the movement of the left hand. Which patient herself noticed as soon as she came around. It is also dry.

The R. hand is also fairly dry, but the fingers are blue.

25.4.46. Patient looks & feels well. She is to get up today.
Check. Slight dullness on L. base
breath sounds: bronch vesic. 6 b.b.
Otherwise N.A.

The L. hand is very warm, dry - flushed. The pulse at the wrist is still difficult to feel.

26.4.46. | Very rapid. In addition to changes previously noted
the 2nd. and 3rd. ribs on L. side have been partially
resected and there is localised opacity in root of
necr or open or kept probably due to effusion in
extra pleural tissue.

29.4.46. | Patient up and well.
Her P. hand is rebel: blue, thirst reason why, warm.
L. hand is much warmer, v. is pink vs color. The
veins of the L. hand are fuller than those of the R.
They fell more quickly. v. on elevation of arms to
head level they empty more quickly. v. held in both
arms vertically, upwards it is seen that the L. hand
remains pink, while the fingers of the R. turn
from blue to white. This means that oozing from
clots has been overcome on the L. side as a
result of the Sympathectomy.

Resp. | Oxygen 9/13%

25.5.46. | Right carico. Horacic Sympathectomy. Pri. bessmall.

The patient was placed in semi prone position. Fig.
towards her R. side.

Keimi. 1st cervical to 4th horacic spine. truncles were
divided - retracted. 1st. 2nd. 3rd ribs were
recognised. The pleura between 2nd & 3rd ribs was
pulsed forwards, but with considerable difficulty, for
the adhesions were even more numerous than at the
other side. As such, around the 3rd rib was used to
elevate the same. The rib & interc. processes were
exposed subperiosteally. 2nd rib was dealt with in
same way. The 2nd & 3rd intercostal nerves were
exposed. The 2nd was adherent to the pleura. They
were isolated. 3rd division with the chain divided. The 3rd
chain was divided below 3rd
gastro. v. upper end was shifted into neck muscles.
The roots of 2nd nerve were excised. vom 2. of the nerve were excised.
The 3rd nerve was left in situ.
Deep muscles were closed with umb. & catgut
sutures.

An anchor dressing was left in place with 3
deep Vicryl sutures.

Summary. R. cervico thoracic sympathetic.

Progress.

4.5.46.

Post 1\%,

P.U. last night. Has not vomited. Is comfortable.
R. hand is now pick, warm and dry. 11 he veins are filled.
Temp. pulse 76. sleep are raised.

5.5.46.

Stitches of first operation removed. The scar is beautiful.

Sporadic 11 1/6: 10 p.m.

6.5.46.

Patient is pale, but feels quite well. Has not been
sleepup well since the operation. Temp eh back to N.

7.5.46.

V depo report. Post 1\%. 2nd. Rib ribs on R side have been
resected. There is an opacity in the upper zone of R upper
suggesting extra pleural effusion. There is partial pneumo-
on R side with collapse. R lower lobe, with a small amount of fluid in lower part of pleural cavity. The gravity is noticed in the rest of the rest of the R. side at 1st examination.

5:46.

Patient feels well.

5:46.

Breathing exercises have been started.

5:46.

Chest:

R. upper lobe: dullness v diminished breath sounds.


13.5.46.

Chest:

R. upper lobe: diminished breath sounds.

R. lower lobe: dullness.

14.5.46.

Patient up today.

15.5.46.

Chest:

R. lower lobe.

Percussion = L side.

Fair breath sounds? V.R. normal

17.5.46.

Stitches taken out.

18.5.46.

Patient discharged. in good health, and will keep warm dry hands.
DISCUSSION.

Raynaud's Disease. "Ilihia" means cyanosis of the extremities. Paresis by cold, with the skin a normal color between the attacks. Pallor does not occur in this case, but pallor is not an essential feature of the condition; for Raynaud's phenomenon is characterized by spasm of the small arteries and arterioles; the color of the skin depends upon the state of the minute vessels, which act independently; may or may not be constrictive. Typically, the thumb is least affected by the condition.

This is an uncomplicated case of Raynaud's.

The permanent changes of ulceration, sclerosis, and rarefaction are not seen. This is in agreement with the statement that "if trophic changes do not occur during the first few years of the condition, they are unlikely to develop later."

That the condition was due to spasm was well demonstrated by the skin temperature response to warming of the body. Here it was seen that the extremities became warm when spasm was overcome by warming of the body.

The patient's main complaint was of "chilblains" which frequently ulcerated. From her description of hemi, and from the position of the scars on her hands, there were obviously true chilblains. They are not ulcers due to depersonization or necrosis following arterial spasm, but are a manifestation of a milder degree of ischemia, accompanied by stasis in the minute vessels. Such adverse results in an accumulation of metabolites, which leads to the liberation of "H" substance. An inflammatory hyperemic reaction results, capillary permeability is increased, there is fluid exudation, swelling of the part, which adds to the pain interference with joint movement. It is
The bursting of these blisters then produces chilblains ulceration. These ulcers show secondary surface infection.

Vascular: From the functional disorders characterised by vasoconstriction.

Acrocyanosis may be considered. It is a persistent blueness of the extremities associated with poor venous flow. Scleroderma.

Purpura cyanosis frigida are not simulated away cervical ribs.

Exercise and well will are the obvious factors to be considered. The patient states that exercise helps to keep her limbs warm, but not to any appreciable extent. But as cold is always the precipitating factor the main thing is to keep the body temperature high, or at least to prevent the extremities from reaching a lower temperature than the rest of the body. Miss Russell found that fur-lined boots kept her feet free from chilblains. It is not possible for her to protect her hands.

The same way, my desirable for her to seek a 'wearer' occupation. In this case sympathectomy was carried out to relieve the symptoms.

Surgical: A surgical treatment was done by the posterior approach. It is the most successful operation for chilblains disease. The reasons for choosing this particular operation are best seen by considering the disadvantages of the other method of sympathectomy — arterial neurectomy.

The original operation done before it was...
You might know them or explain them.
The origins of the sympathetic supply to the upper extremities.

C 5
6
7
8
9
10

Pre-sympathetic — blue
Post-sympathetic — red

The sympathetic stenotic is performed to produce full vasodilatation. Parasympathetic alone presents evidence of practical difficulties. Parasympathetic-brain sections are followed by regeneration. It is not a full degree of vasodilatation. Sympathetic has been. It is performed. It has been considered that sympathetic vasodilatation is normal only if the cells of the post-sympathetic fibers are removed. Apart from the result of Horner's syndrome, the results are not good, because the post-sympathetic fibers degenerate. The smooth muscle of the arteries becomes very sensitive to sympathetic stimuli hormones — a sensitivity increasing to a maximum in a few weeks. The patient relieves again with vascular spasm in a few months. This hypersensitivity develops regardless of whether the vasomotor pathways has been divided in its pre-sympathetic or post-sympathetic portion; but it is particularly marked after post-sympathetic degeneration. After carotid sympathectomy, the operation is followed by a maximal sensitization in the vessels.
b) Smithwick's modification. Here, as well as dividing the clavi, the axillary and posterior roots of 2nd and 3rd ribs, the subclavian nerve was divided. The posterior approach is used. There is no sequestration provided the upper end of the clavi is stitched with musculature, and when this is done, and the ulnoverebral foramina blocked, it is unnecessary to use a felt silk sleeve to cover the scapula at the upper end of the clavi as advocated by Smithwick.

The result was dramatic and immediate. Each hand in turn became hot and dry after the operation. The flushed appearance subsided, and the hands became normal in color. It weeks have shown no after-effects of this state. The section of the ulnoverebral nerves resulted in a zone of anaesthesia round the thorax. This is of little importance, and in a few months it will have become narrower. The weakness in the limbs following the operation can be adequately accounted for by the interference with the scapular muscles. Though some suggest that the weakness is in part due to division of the Suprascapular nerves which sends some fibres directly to muscle, and these fibres have a strong action.

The patient progressed well. Chest signs appeared after the 2nd operation. They were unaccompanied by any symptoms. During the operation, numerous pleural adhesions had to be broken down. This undoubtedly played a part in the production of the pneumothorax. The collapse recurred partly from the partial pneumothorax, partly from diminished air entry during the first few days following the operation. This state of affairs cleared up after breathing exercises were instituted.
Immediate. prospectis excellent.

Practically.

The intensity of the cerebral attacks will be reduced if the patient will be remarkably free from chills due to the improved blood flow will prevent occlusion. The accumulation of vasodilator substances. Complete cur is only possible, if, as believed, the primary cause of the phenomenon lies in the hyperactivity of the Symp. system, but in an abnormality of the vessels themselves. Normally, vessel constriction is brought about partly reflexly, partly by direct action. Now that the nerves concerned have been divided, reflex vasosclerotic can no longer take place. Not even reflex inhibition of vasosclerotic occurs as a result of vasodilatation (presumably reciprocally continual progression). This factor may be of importance there appears a considerable degree of recovery after the operation.

Usually, in the course of time after sympathetic, a moderate degree of tone returns. This presumably is constriction produced by direct action of cold, and it shows that the arterial walls are abnormally sensitive.

However, if the greater element in production of, suspens or Raynaud's phenomenon is produced reflexly, the resultant vasodilatation following sympathetic, should so increase the circulation as to overcome this local vasosclerotic.

In this case, sympathetic led to such striking results that we can assume that a great deal of the spasm was produced reflexly, as that was it is relieved. The symptoms will be alleviated.

No adequate progress can be made, because the pathological facts are not fully understood. Generally speaking, these facts may be divided into 3 groups:

1) Psychological, which play an part.
2) Hyperactivity of Symp. system.
3) Hyperirritability of arterial walls.
CASE II

Age: Thomas Tearar.

Note: OSTEOMYELITIS OF UPPER END OF FEMUR.

Admitted 22.5.46.
Discharged 18.6.46.
To Asharil -*- Alishi.
CASE II

Name: Thomas Tenari
Age: 37 yrs

Address: 24 Alexander Street, Tiranari

Previous Admission: Oct 1946

Admission: 22-5-46

Diagnosis: Severe pain in left hip.

Patient was perfectly well until 3 days ago, Sunday, when he came on suddenly during his work. He was working in the mine, and at midday, as he was handling a large heavy piece of coal round to the left, that piece of coal broke in two, at which moment he was felt a jarring pain in his left hip. It was not sufficiently severe to make him stop his work. He worked on for half an hour or so, feeling this jarring pain periodically. Then he walked home, the shooting pain gradually became worse and late that afternoon it was constant and severe, which it has been ever since, the hip joint pain keeping him awake all night. The same evening after the incident, he felt sick and shivery and sweated a good deal. He liked to get out of bed the following morning, but when he put any weight on his left leg the pain became unbearable. So he stayed in bed all day, but the pain never left him. Heat applied to the pain made it worse. The following night, Tuesday, he sent for the doctor, because the pain was still constant. The doctor gave him two morphia tablets, but the
The patient was worse than ever, as the effect of these had worn off. He was sent up to 5.0 P.M. this afternoon.

The pain, of which he complained, is very localized and does not radiate to any other spot, but as the patient says, it makes up for its size in its severity.

He has felt sick and fevered ever since the accident. Thinks he vomited last night, but is not clear about this side of the time. Otherwise no vomiting. His bowels have not moved since Sunday, but he has passed stool.

He has not been ill previous to the accident, but there is history of a boil on his back of the neck during the previous week. It has now disappeared.

**History.** The patient has had no illnesses, apart from peptic ulcer, for which he had ambulatory treatment two years ago.

**Family.** Alive and well.

**Wife and children.** All well. There are 3 children.

**Medical Examination.**

An ill looking man, obviously in great pain, breathing rapidly with a rapping heart, and sweated a good deal. His feet cold and chilly; his breath is bad.

Temperature: 104° F.

Pulse: 142

Respiration: 24

Lungs: Clear; chest coated with a brown froth.

Skin: Distended with gas, therefore difficult to
This is another practice draft content.
palpable. No tenderness anywhere.

Kidneys Mr. palpable—no tenderness.
Lungs and spleen not palpable.

Hip.

Inspection: There is a diffuse swelling over the hip. There is no rubor, dilated veins, or increase in local temperature.

Palpation:

Globally, there is no pain, but is there any pain on touching lightly the area indicated by the patient as being the painful spot. But on pressure over the posterior aspect of the hip joint there is tremendous pain which makes the patient wince. The two points of greatest tenderness are:
1) 3" posteriorly to the greater trochanter, and
2) a point a little above the ischial tuberosity. The area of tenderness is very localised.

Pressure elsewhere does not elicit pain.

Movement:

Globally restricted because of pain, but probably unaffected otherwise.

External and internal rotation are very limited. The knee can only be flexed to about 30°.

There is no pain in back or groin on movement or on palpation.

At this stage, after the giving of anesthetics, when the patient was given an i.v. injection of morphia, and i.v. administration of penicillin was started.

B.C.

8.000 per centum.

N.B.

No bony abnormality, no soft tissue lesion obvious.
This is suggestive of rupture of the supraspinous muscle. The condition is not often seen, nor are there any adhesions for passive movement's normal. They are painless. In the view of the writers, they cleared up without intervention during stay in hospital. One can say it must just have been incomplete rupture. I think the injury could have been produced during this short moment of physical
Progress Notes.

Temp 103.5°F. Patient still looks very ill. He was sick after his lunch, he has no appetite.

Trachea: moist, but thickly furrowed.

Bowels moved his morning.

Patient is lying on his back. The left leg is in a Thomas splint, and is in full extension; extension maintained by 1 lb weight. This affords immobilisation and takes the tension off the muscles attached to the hip joint.

As a result the patient's condition is of but little pain, provided he keeps his knees on the floor. Today he has pain in R. shoulder; difficulty in moving the R. arm.

There is no swelling visible.

Palpation: Paral. palpation does not give rise to any discomfort. There is tenderness on pressure over the tip of the acromion, and the greater tuberosity of the humerus.

Gomnent: With the forearm extended, the patient can abduct and adduct his arm without pain. He cannot raise his arm at all, but it can be raised passively, without producing pain. However, on lowering the limb, at 90° in particular, there is great pain felt in the shoulder (deltoid).

Internal rotation of head of the humerus also causes pain in the shoulder joint.

5. 46.

Following further extension of the by this morning, the patient felt pain in the leg. This is seems to be
due to pressure a breakage; the hip has slipped down too far, not only this, but his ear hip is now at present.

The pain still troubles him also when he coughs.

Appetite poor; no vomiting today.

Bones have not moved today.

Patient is not sleeping well.

5. 46.

Patient feels a little better. He looks much better.

His appetite is returning.

continued. General impression. Patient is not well. He
is willing to help, but is very apt to wander from the pt.
A 6" square within midclavicular line.

Sounds closed in all areas. 2nd sound is
accelerated in both upper, pulmonary areas.

B.P. 130/80 mm Hg.

He#:

Upperness N/A. It is not possible to examine lower

85000 per c. mm.

5. 46.

Both legs are abducted. This has relieved the pain in
the hip.

Sedatives were started this evening, but the patient
soon complained of buzzing in his ears, x deafness.
Administration was discontinued.

5. 46.

Temp normal. Patient still feels very weak.

Appetite has returned.

So & 10 p.m. p.r.n. now, not even on complaining.

The hip still feels very full posteriorly, but there is no
heat or redness. There is still pain on pressure.

The left arm is no better.

15,000 per c. mm
3. 5. 46. Patient still looks ill, is very drowsy. Appetite is quite good. He is still on penicillin. Temp. in normal. Hip in out of the splint. Patient is lying with his left leg comfortably. The foot of the bed is raised. The skin of the pain in the hip, and in front below the surgical layer.

On palpation there is no tenderness anteriorly, there is some tenderness over the greater trochanter. There is slight swelling from the hip. Posteriorly, there is slight acute pain over the hip. The diffuse swelling is still present. There is no discoloration.

Rash is better. Temp 102° this evening.

0. 5. 46. Foot of the bed is still raised. The legs are protected by a cape. Patient is still suffering from any pain at present.

The veins over the anterior aspect of hip are distended in superficial epigastrium, superficial external pudendal, circumflex iliac. There is some edema laterally. The local temperature here is increased a little.

5. 46. X-ray. Shows slight pressure of greater trochanter on the left side.

12,000 per c.mm.

Incision of Abscess — Dr. Dillon.


Hyoscine dr. 1/16.

The patient lay on his R side. The area posterior of the greater trochanter was tender, very fair.
It was not discussed. A bédore, 5 x 3 cm was
seems to be present, at the upper end of the nasal crys.

Aspiration was attempted with a long bone needle,
2½" posterior to the bony canal. From a deep situation
a little blood-stained material like pus was
observed. It was taken as a specimen.

An incision was made 2" in length, the centre
of it being 2" posterior to the greater trochanter. It
was made parallel to the fibres of gluteus maximus.
The fibres of gluteus maximus were divided
and retracted in either direction. The fascial layers
over gluteus medius was incised, the muscle
divided in the line of its fibres, fairly close to
its inferior border. The parts were retracted in either
direction, the upper one together with hamstring.

Now down the femur, a moderate amount of thick
serous pus was found lying posterior to the
greater trochanter, in the digital fossa.

The posterior aspect of the greater trochanter
could be felt above the digital fossa, the neck of the
femur. No bone was seen felt.

A rubber drain was placed in this wound, the other
end of it reaching up to the digital fossa.
The skin edges were approximated, and held in
apposition by means of interrupted silk suture. Sticks
were applied to the wound.

A dressip was also placed over the bed sore after
this had been cleaned.

6:46. Patient is sleeping on his back. Temp 100°.


6:46. Patient is lying on his back. He feels very weak.
but otherwise alright. x is eating well. He can now
lay over onto his R side without causing any
pain in his leg, and this he does to expose the
bed sore which is being treated with spirit of
pawder.

There is no pain in the hip now, and patient can
flex leg almost to a right angle.

R arm is a little stronger, but he can only raise
it a little by himself. There is no pain now on
pressure over the quadriceps tubercle.

5. 6. 46. Drains out.

6. 6. 46. Patient still weak, but "is weary up to get up."

7. 6. 46. Stitches out.

8. 6. 46. Patient up today.

3. 6. 46. Progressing satisfactorily.

Wound: There is an area 2 cm in the centre of the
wound which is still discharging a little.
Bed sore is now dry & healed.

8. 6. 46. TRANSFERRED to Rolle's Burns Institute.

Review under Report:

Sporulated fluid — No organisms cultured.

Sputum smears — Film showed Staphylococci.

No organisms cultured.

Kei Yura, N. Quebec.
No definite diagnosis has been reached.
On admission the patient was suffering from acute pain in the left hip, complete immobility of the left limb, and general systemic disturbance.
Swelling, tenderness, were the only signs of inflammation present. The picture suggested an attack under tension in the region of the left hip.

The diagnosis could be discussed under two headings.

1. Probabilities or possibilities of possibilities of
   Possible lesions - of bone, joint, muscle, bursa
   etc. The probabilities in this case are osteomyelitis,
   infected bursitis, infected osteo-arthritis, etc.
   They will be discussed under these main headings.
   Osteomyelitis.

There was definite relation to trauma, a factor almost invariably found in cases of acute osteomyelitis in adults. Fever followed the trauma in a few hours, radically an early sepsicaemia (for the fever became very severe).
Presumably the patient had a bacteraemia, which became a sepsicaemia once the bacteria were able to settle out. The history of a boy during the previous week is of great significance. The patient's resistance was low at the time, confirmed by the extremely poor leucocyte response to the infection. Obvious predisposing factors to this resistance were fatigue, damp working conditions.

The injury, necessary for the settling out of the bacteria may have been provided in the damage to a vessel in relation to a small area of periodical slipping. This is only one possibility; in other cases will be considered later. A blood clot
Так я ще не знай, це запитання!
- І я не можу їм відповісти.
- Можливо, я можу це робити, але не можу навіть відповісти, це запитання.
provides a favorable nidus, where the bacteria settle and reproduce, the general effects of the infection. In the case of periodicity, this nidus would be subperiodic. As the organism wassleepy, everything was set for an osteomyelitis.

The predisposing factors here: the presence of sleep, together with the modern ones, suggest ourselves. Almost all cases of osteomyelitis start as a septicaemia, with severe general effects. Also, as a general rule, the deeper the lesion, the severer the disease.

The first X-ray was negative, but this is common, so in the early stages of the disease. The leucocyte count was low. This was 7 days after the onset. It was here that there was an initial leucostasis, but later this was overcome by the resilience of the polymorphonuclear, in particular by the leucocyte of the sleep area.

Penicillin in such large amounts as were administered arrested the growth of the organism, allowed the body to increase its white cells. Without such therapeutic measures the infection probably could not have been overcome.

However, had the condition been osteomyelitis, one would have expected bone changes to be seen by later X-rays in spite of penicillin; for it is said, one of the main pathological changes is resorption, followed by calcification off of the bone supply by the periodontal ligament. However, one would also expect some vascular compaction within the bone canal. Had this occurred, as it had to, then penicillin by systemic administration would not reach the lesion at sufficient concentration to attack the condition completely.

The only way, obviously, seen was slight pain of the grade: "boneache." — of little significance. So it may have been the indication of an early 12-
Clinically, a point against the diagnosis of osteomyelitis was the absence of tenderness anywhere else in the staff, or indeed in any other part of the body. The localisation of the inflammation of the muscle was the most suggestive feature.

**Infected Tenderness.**

In this case the "injury" is provided by damage of vessel elsewhere than in relation to periosteum. A thorough search for an infected bursa was made. There was a rupture of a muscle. The muscle may have been:

a) within the muscle itself.

b) within a sheath of the fascial sheath.

c) accompanying rupture of a muscle.

d) rupture of a vessel outside but closely related to muscle, e.g., the termination of the ascending brachial or the medial circumflex artery, considered the distribution of pus.

The man remembers that pus may have drained up to the digital fascia from a more distal point, thus explaining the fact that the leg was elevated at rest.

e) bursa into bursa. (see Enthesitis).

The mode of onset is suggestive of a rupture of a muscle, but before grip and fullest extension of the knee, the patient would not have moved the leg.
acting to fix the lower limbs — adductors, medial or
ilialial rotators of the hip joint — adductors, hip flexors.
Antagonists to these muscles act the glutei, obturators,
 quadratus femoris, piriiformis. The sudden release
of tension leads to an increase in the moment of
the upper half of the body resting against the left.
It also means that the muscles were left momentarily
in some degree of contraction, thus the
adductors acting most powerfully, it is easy to
understand the considerable amount of strain that
must have been put on the lateral columns.
Such are the forces in question. The latter idea may
have been in the nature of an active contraction,
contraction of antagonists, asynchronous contraction, an
increase of inertia over cohesive power, or
spinal distortion in a lumbosacral. And rupture may have
occurred anywhere from the hip to the insertion of
the muscle — usual site is the muscle labrum
junction. But rupture of muscle such as is
well demonstrated in the case of the flotor of the leg,
is unexpected at the hip — where the muscles
have shorter, coarser fibres, and where there is
more gradual transition from muscle to tendon.

Tendinous rupture is ever less common. There are no
predispousing factors in this case.

But, therefore, in spite of the likelihood of rupture from
the nature of the injury, there are more points against
it than in favor of the latter had happened: —

The site — frequency — already mentioned.

Tendinous rupture occurs there is retraction of muscle
fibres with resultant palpable mass (157. Him
may have been too deep to feel). The patient
experiences sharp pain during the incident but
immediately lessens. The leg becomes weak, more
powerless. In Terran was able to walk only
Информация о результатах эксперимента.

Количественные данные и результаты анализа.

Заключение:

Анализ выполнен с учетом всех параметров и условий эксперимента.

Сравнительный анализ показывает следующее...

Меры предосторожности:

1. Необходимо соблюдать...</n
After the accident:

Hernia of other muscles is not a real iliac fascia, as it arises with more gradual onset. A pseudomuscular hernia is produced by bulging of an iliac or abdominal muscle through its sheath—of sudden onset—accompanied by sharp pain. Neither are likely in view of the dense fascial covering of these deep lumbosacral muscles.

Other Conditions.

which need to be considered.

1. Infection, supp. under iliopsoas, more likely re- under gluteus medius. Infection, related to abscess, may have been spread by emigration from a septic focus nearby. The abscess would have become filled with pus. His well thickened. Such a lesion, had it remained localized, would have been obvious during the operation. Also, in a tense lumbar, restriction of movement of the affected is much less.

2. Arthritis. A blood borne infection, rarely, always secondary to some more obvious disease, but it is a possibility. But in acute arthritis the joint is invariably held in the flexed position. All the structures in the joint are involved, including the cartilage, but it never showed so increase in the size of the joint cavity; nor was there any noticeable swelling of the capsule or exudate in the joint. Your hip, which was a hip joint, was involved.

3. Lymphoma bones. metastatic but rare, extremely, unlikely.

4. Exacerbation of a chronic disease, as a small septic focus is related to the joint. Occurs if an animal suffers from some chronic illness e.g. TB. Systemic e.g. right produce an acute exac-
resorted to Kahl's disease, this accounting for the gross systemic disturbance. There is no indication of any chronic infection here: the local test is too severe.

Summary of Diagnosis:

An acute abscess, clinically "ripped in the bud" by pericelum.

It affected locomotion with or withoutDuplex of muscle, probably will 1st.

The patient also 26. pain in the back. This was demonstrated to be in deeper muscle. The site was observed his muscle, above the same actus as injured his leg. The gradual improvement of pain & muscle power are in favor of this, but it is possible that there was abrasion or even localized myositis but this would likely have been supportive in nature, which it was not.

Symptomatic:

Immediate relief was to relieve pain (not to keep the contact against the organ). ice pack was given, 12. - continued daily for 11 days, after whichEllen & Napelle were given. Ellen for its action as a hypoten. Napelle catalysis about 1/4 of the amount of pure paracetamol. After pain had mostly disappeared by this time, it hardly seemed necessary to give opiate at all. Good effects to fourth narcotic are acetyl salicylic acid, phenacetin et. However, the patient was hypersensitive to salicylate as shown by the ad
admixture of a, sodium salicylate to the acute stages of the 1st as a means of symptomatic relief. Hypersensitivity was shown by the very early manifesta-
Treatment of a Leg. Rope. The leg was immobilized in a Thomas' three-point, combined with fixed elevation to prevent any movement at the joint. The foot of the bed was raised. This ensures the maximum benefit from the use of the splint, and prevents the drip from slipping up, pressing on the groin. Pain rapidly diminished in intensity, but was still present occasionally.

Drainage was instituted where it was obvious that pus was still present under tension. Pressure caused by the swelling, condensation of the surrounding parts, and small signs of inflammation were present—dilated veins, increased local temperature. It was 9 days before drainage was alleviated. This allowed local use of the pus. Drainage was confined to the affected area. No bare bone was felt. But had the diagnosis of osteomyelitis been more certain, a small hole could have been drilled in the periosteum in spite of the fact that the periosteum appeared normal. The pus obtained was very thin, but not blood-stained, as it might have been if from osteomyelitis.

Chemotherapy. Peritubulin was given up to a total dose of 8 million units by 3 hrs. i.h. injections. This is the best mode of administration for such a period as 21 days. Its great disadvantage is that the patient never gets a long sound sleep. I.V. drip is excellent for systemic administration—but not for long periods.

The striking thing about the treatment in the last 15 years has been the various new types of penicillin. For an
pointed out previously, sepsis is a prominent feature of the condition, especially associated with the absence of a previously infected focus or any other causative factor. The affected part is sufficiently high concentrated, and if only a short course is given, the general symptoms manifest clear up, in abstinence, pericilli accumulate around the lesion, but when administration is discontinued, the deep seated infection may well overcome the barrier. The disease manifests itself more or less by large enough amounts are continued for long enough. The barrier is strong enough to prevent recurrence.

Pericilli were effective in this case, especially so because the organism was Sept. aureus.

I think that whenever possible, a blood culture should be done on patients who come into hospital with sepsicaemia, for once chemotherapy has been instituted there is no means of finding out the nature of the infecting organism. This question is of even greater importance when pericilli is not available, so one has to use sulphamides.

Sulphamides are specific for S. aureus, sulphadiazine for S. pyogenes. Sulphadiazine is equally valuable in both. This should be the drug of choice when it is impossible to eliminate the bacterial pressure. Sulphamides would be given orally.

The patient is being given a long period of convalescence, so that Kumar may regain his strength, full exercise, the affected limb.

Very good. The patient is now well, there is no
a carefully
disability of the limb. It is exceedingly unlikely that such an illness will occur again. But the patient is probably one whose normal resistance to slight infection is low (i.e., there is no history of sore throats, general ill health, etc.). This resistance depends to a very large extent upon general health, and if he is able to take an adequate diet, get sufficient recreation, and his general condition should be of a high enough standard to prevent his having another general staphylococcal infection. It is not to prevent the occasional boil.
CASE III

T. M. Beatrice Haig Wood

RETICULUM CELL SARCOMA.

Admitted 4.10.46
Discharged 24.10.46
Ward 13 14
Name: Mrs Beatrice Keir Wood
Age: 62 yrs
Occupation: Housewife
Address: Loanside, Yetholm, Roxburghshire

Examined by: Dr. Taylor
Dated: 4.10.46.

Complaint: Swelling on the left side of her neck.

In February of this year, she noticed a small firm lump just below and backwards to the front of her left ear. This was not sore or tender. It grew progressively bigger, spreading downwards and forwards as it did so. It still remained hard and painless. She was seen up to 7.1.46 as an out-patient. By her doctor, in July, it was seen in Ward 1B.

A biopsy was performed at this time, and a gland removed from her neck under local anaesthesia. She was reexamined in August. The swelling was still increasing in size, still without pain.

She has now been admitted on October 3. Three weeks previous to her admission she felt the mass beginning to "press on the throat." She has had no dysphagia, dyspnoea or deafness. She is not losing weight.

Her general health has been very good, and she has had no other illnesses.

Patient has had no trouble with her stomach, nor any symptoms referable to the alimentary tract. Bowels regular.

Her history is non-contributory. She has worn spectacles for 3 yrs. - for hypermetropia.

Her three children aged 20, 17, 15 yrs. - All healthy.
Tonsils were all normal.

Percut dead of old age. No history of any other member of the family having had swellings in neck.

Innervation

10.10.46

Description. A well built, fairly healthy looking lady. She is cooperative, but is obviously much distinguished by the emaciated lump which is causing great discomfort of her neck. It projects beyond the plane of the face. Group has a “bull neck” appearance on her side.

Left side. There is a large swelling occupying almost the whole of the anterior triangle and the anterior part of the posterior triangle. It is limited superiorly by the lower border of the mandible. Anteriorly, it reaches as far as the midline at the level of the crease under the chin. Tracing this anterior margin of the swelling, it next passes to the inferior end of the sternomastoid. Medially, it reaches as far as the middle of the clavicle, but does not descend over the clavicle. The posterior limit is indicated roughly by a line drawn from the midpoint of the clavicle to a point 2" behind the ear.

Sternomastoid cannot be defined. Not felt to contract.

The biopsy occurs is a vertical one of 2" scar beneath the ear.

The mass is firm in consistence, but has soft, thick, hard parts. The anterior and posterior boundaries are smooth and very easily felt. Posteriorly the boundary is rather irregular, nodular, and fuses with a chain of enlarged glands which can be well felt firm, immobile, and indiscernible.
The mass is not adherent to the skin except at the scar.
It is almost immovable except to its large size.
R. side. Sternal border is easily defined. There is no
nodiules present.
Trachea is pushed slightly to the R.

Lymph nodes elsewhere are not palpable, with the exception of one
enlarged node in R. axilla.
Spleen - not palpable.


C.V.S.: Heart sounds are clear in all areas. B.P. 142/98 mm Hg.
Pulse: regular, slow, of good volume. Arterial wall
is palpable.

A.S.: Tongue, moist, but furred.
Teeth, faucets, apparently normal.
Abdomen: Well covered, not moves well with Res.
No visible swellings or signs of peristalsis.
No palpable - nothing abnormal could be felt.
Liver, spleen, kidneys: Not palpable, nor tender.
P.R. - N.A.D.

S.N.S.: Cranial nerves: all functioning normally. There is no
difference with any nerves on the R. side.
Reflexes: Equal. S. rect. & kps.
Optic/oesoscopic exam reveals nothing abnormal.
Abdominal: Reuter reflexes: Normal.

Mood: 4.6/12.00
WBC: 3,500
  Polys 46%
  Lym. 30%
  Leuk. 16%
  Eos. 10%
  Basso 1%
**Provisional Diagnosis:**

`abnormal growth in glands of neck. Without biopsy report it is impossible to say whether this is a primary or a secondary lesion (for clinical differential diagnosis see 'discussion').`

**Progress Notes:** (Reports are discussed later).

The biopsy report of July is that the lesion is a squamous cell carcinoma.

- **9.10.46.** Referred to the Simpson Hall for examination. He found no primary growth in nose, nasopharynx etc.

- **10.10.46.** Referred to Radiology Dept. Dr. J. White, has asked Dr. Ogilvie to review the slide, as he believes this to be a case of sarcoma. WBC. 4.500.

- **11.10.46.** X-ray therapy commenced.

- **12.10.46.** Revised Pathological report received "reticulum cell sarcoma."

- **14.10.46.** WBC. 5.200. Patient is only comfortable; still getting relief after the X-ray therapy.

- **18.10.46.** There is slight diminution in the size of the swelling, but this has not been noticed by the patient yet, and she still feels it "pressing on her larynx."

- **21.10.46.** Remarkable change in the lump. It is softer, much reduced in size and slightly movable from side to side. It no longer presses on her larynx, and she is
delighted with its progress. She still has right headache after radiotherapy. Appetite good.

24. 10. 46. Radiotherapy course has finished. The swelling has literally walked like sand. Though it is still palpable in middle of neck over sternomastoid. Patient's general health continues to be good.

Therapeutically the temperature has been average 97°F. Pulse 68. Resp. 20.

24. 10. 46. DISCHARGED.
That dosage of radiotherapy.
DISCUSSION.

The diagnosis presented a considerable amount of difficulty until the post-mortem report. A reddish, elongated, oval, firm mass was received. It will be discussed from clinical and pathological standpoints—separating him at the beginning, for his sake, clearly.

B) 1st July. Small to feltable tumor of the mandible, and before biopsy. A small lump below the ear, opposite the angle of the mandible. From the chart, the history, from signs and lack of symptoms, it was obvious not an acute inflammatory condition. It was possibly due to chronic sepsis from the tonsil or elsewhere in the nasopharynx, ordered from the scalp. But here was no gross evidence of any primary infection. One could not exclude this latter. From its position, it appeared to be glandular, not ophthalmin, and not arising from the thyroid, or brachial pleat. It was not acute.

The likelihood was that it was an early tumor growth of primary or secondary nature. The suspect report at this time was:— (26th July).

"I do not think this arises from the thyroid, but that it is due to enlargement of lymphatic glands on the side of the neck. They are fairly firm, but have not the firmness of malignancy."

B) Small to feelable tumor presented itself, with enlarged swelling on the side of the neck, so had to consider numerous conditions, the main ones of which were:

1. Inflammatory node.
3. Leukemia.
4. Secondary carcinoma.
5. Lymphoscarcoma.


Ret-Eberstein type of tumor is supposedly common in Hodgkin.
A cutaneous lesion was eliminated on account of its size, shape, situation, consistence, and lack of fluctuation.

1. **Inflammatory Conditions.** This is certainly an acute inflammatory process. There is no rubor, calor, or dolor, nor systemic upset, in our primary focus of infection. Chronic inflammation can be excluded from the history, from the examination of the involved, dusky, swollen, lack of systemic disturbance. Fever is absent, which is highly improbable at this age does keep more definitely to the bounds of the nodes. And when as large as this, the lesion would almost certainly be an abscess, in which case fluctuation could be elicited. As syphilis in its earliest stage would give a more generalized picture, previous history.

**Koch's disease.** Here commonly occurs under 60 yrs. The patient, prepubescent, enlargements of lymph nodes usually begin in one group and spreads to another. Only one group is involved in this case. In this area, the features of lymph node swellings are important. It early stages they movable easily. To the feel they are firm, belligerent. They tend to remain discrete without the involvement of the capsule or coalescence. The skin is only rarely involved. After a while the enlarged lymph nodes tend to become mass, tissue, then mobility lost. The individual nodes are difficult to recognize.

So far the description is applicable to Bus World's lesion, with the exception that the glands did remain discrete.

And, it's early, tuberculosis. The patient is 60 yrs, there is little of no anemia, general symptoms do usually appear after some weeks, isolation, or blistering. Also by this time, other nodes in the body are enlarged. In the spleen...
Chronic lymphatic leukaemia is explained by enlarged glands.
is usually palpable.

This case, 9 months after onset, with shows no systemic upset—fevers or anemia. No other group of nodes is yet involved—which makes the diagnosis of Hodgkin's very doubtful.

3. Leukemia. The condition does not present any clinical features of an acute leukemia, nor is it the same likely in an old person. Severe systemic disturbance is present, anemia in the usual degree, i.e., in the acute subacute forms. Leukemia may develop in various parts of the body.

These are composed of undifferentiated white cells, which infiltrate the surrounding tissues like a malignant growth. However, it is WBC shows numerous large mononuclear—i.e., even in the rare leukemia cases. The majority of the cells are myeloblasts. This body had a normal total count; i.e., myeloblasts present. As regards the more chronic forms of leukemia, myeloid is associated clinically, i.e., a large spleen, i.e., with enlarged lymph nodes as the best shifting palpable blood film in all cases rules out the possibility. From the general point of view, however, the case is right for a chronic leukemia, i.e., in this case fever, anemia are also absent; i.e., the early stage.

Chronic lymphatic. This word certainly does not present the features of an acute case, with generalized enlargement glands, liver, spleen, accompanied by leukemic blood picture. But in almost cases only one group of glands may be involved. The villous possible be associated with the rare occurrence of N. blood film.—acute leukemia or a leukemic leukemia, i.e., in which the total white count may not be increased. I.e., there is a high % of lymphocytes. Actually, the blood shows a normal total count i.e., increase in % of lymphocytes. But even
Chronic lymphatic leukaemia is characterized by enlarged glands.
In rare cases, the characteristic picture of leukemia appears sooner or later: in the clinical point of view it is that the glands were palpated very large, whereas in L.H. they need to be discrete and of moderate size.

4. Lymphoscarcoma. locally malignant. Sheわびびにon:
the cervical lymph node. The enlargement is rapid, malnutrition follows soon occurs, leading to local destruction. The only relief is surgery. Symptoms are due chiefly to pressure upon one of the splanchnic structures. If centriloculicular or Hodgkin's, the general symptoms are few. Fever is less common. The blood picture is not distinctive, but in few cases may suggest lymphatic leukemia. Lymphoscarcoma may occur paranionally in the tract. The patient exhibits these features, but biopsy is necessary to distinguish this lesion from.

6. Carcinoma. The lesion appears to arise from lymph node. There is no epithelial structure in a L gland which should give rise to a carcinoma. It does not arise from branchial cleft or lymphoid tissue so far as can be made out. It may be secondary to carcinoma of oropharynx, larynx, esophagus, etc. especially the transitional cell carcinoma. The primary lesion may be small, tucked away, so superficially or submucous. Indeed, it is characteristically hidden, so may remain undetected even by specially trained for. The only clinical evidence may be jaundice of the upper, upper mucosa membrane. In many instances it probably arises from the duct of the glands opening into the surface wall of the flat for. The surface. All this may be seen in a fairly granular surface of slight erosion - as such a mere minor lesion may be overlooked. The spleen of the small size, the lesion is the more -
To find common glandula swelling in the neck - so that a diagnosis of lymphosarcoma may be made - a mistake which may not be corrected even when a gland is removed for microscopic examination.

Clinical examination of patient does obvious in upper respiratory passages, in lung, breast or abdomen.

Against a metastatic case is the fact that systemic disturbance is minimal, in that the nodes are joined by columnar glands. These 'lymph channels'.

From the above one can see the difficulty in diagnosis the 'cold' clinically. However, as in all such cases of glandula enlarged, a biopsy was performed - when the lesion was yet small. The biopsy revealed that the gland had been replaced by a spherical, cell carcinoma involving numerous microscopic figures. The pellicular suggested lymph as a possible source of the primary.

But the lump X ray was negative in this respect. No primary lesion then was found.

She was admitted to hospital to surgical take; by which time the swelling had increased enormously in size.

Still under the impression that this was a carcinoma the patient was sent to Dr. Simpson here who reports: –

“Examination showed no abnormality. There was to be normal pull of respiratory. There was no abnormality in the larynx. Examinations of the larynx showed paralysis of the left vocal cord which was almost complete, but there is no pathological cord with the paralysis as far as could be made of. Allied to this may be due to pressure of the recurrent laryngeal nerve, it might possibly be due to allergic just below the wind of an earlier laryngoscopy.”
In the White case the patient on the same day reported, "The glands are rather soft, and still remarkably discrete for their extent. I think this is a case where the history should be reviewed as it might possibly be a reticulum cell sarcoma arising particularly in the lymph glands of the neck."

The pathologist on reviewing the sections came to the conclusion that it was a reticulum cell sarcoma.

**Pathology.**

Reticulum cell sarcoma is a malignant growth arising in the germ centers, or pulp cords of lymph nodes. It arises from the so-called intercellular reticulum. It is a large round cell lymphosarcoma. To be distinguished from the other lymph, lymphosarcoma - the small round cell variety, or malignant lymphoma. In lymph nodes this growth is lymph nodes may best be classified as follows:

1. Malignant lymphosarcoma (small round cell)
2. Reticulum cell sarcoma (large round cell)
3. Fibrillar reticulum from lymphoid tissue, a slow lymphoplasmic process.

All to be regarded as degrees of the same process. The first two being the most important. Reticulum distinguishes between reticulum cell lymphosarcoma arising from reticulum cells, and a tumor arising from the endothelium which is closely associated with lymphosarcoma but as an endobellum of lymph nodes. This is a confusing distinction - is not generally accepted. However, many pathologists speak.
to a condition of lympho-epithelioma. A recent use of the term lympho-epithelioma for carcinoma derived from endothelial cells of lymphspaces, which may possibly correspond to Sünhe endothelial hyperplasia, reticulum cell sarcoma, or for some, in an inexact, accepted view, is here lympho-epithelioma in reticulum cell sarcoma.

On examining the ovule, one can exclude the condition of follicular reticulum by the fact that there is no remnant of lymphoid tissue present. Sufficient lymphocytes are excluded from picture is not made of small lymphocytes. The field showed fairly large polygonal cells, very uniform in shape, size and fairly loosely packed. The cytoplasm was fairly eosinophilic. The nuclei, round, relatively large and a well defined network. Uniformly distributed chromatin. Nuclei figures are fairly numerous. The cells are supported by a reticular framework. With words the whole picture is that of reticulum cell sarcoma.

But unless the pathologist has this condition in mind at the clinical history, it is very difficult to make a definite diagnosis. For reticulum cell type may be mistaken for hyperplasia and the latter is usually quite distincitive. And in a Zinsser carcinoma one would expect greater variety in size shape, cells, also more hyperchromatism.
This patient is suffering from the condition of lymphosarcoma—a true malignant neoplasm arising in lymphatic tissue and occurring as a localized lesion. This type being more malignant than the diffuse process. Characteristic is its tendency to disseminate inuin various lymphatic structures, notably lymph nodes in this case. But typically the symptoms produced were local, mainly due to pressure. It cannot have invaded posteriorly very much, for there is no sign of pressure on veins, orthopneic pressure, cardiac due to retroperitoneum, or nephrosis—swelling from cervical sympathetic stimulator—nor did he suffer manifestly in Horner's syndrome.

Her general picture agrees in the usual case where cachexia is never marked till near the end. However, pyrexia is a common feature of lymphosarcoma which is not exhibited here. There is usually a moderate degree of leukocytosis for, in polymyositis, lymphosarcoma predominate. Her white blood count was low, but a high % of lymphocytes. No atypical lymphocytes could be seen, nor did the lymphocytes come down after radiotherapy. Therefore we can presume that it is a relative to an actually lymphosarcoma. Hence there appears to be no reason why the polymyositis case should be low—because any lymphocytosis of the bone marrow would also give a low RBC—which did not occur.
grost as this, for by the time it has even reached even a moderate size, its spread is wide. Metastases have probably started elsewhere. And if the tumor is removed when small, recurrence is rapid. Emergency surgery may in some cases have to be performed as a palliative measure - such as a nephrectomy, and a removal of other organs, or the cord - is cure via an adequate vessel, for which surgery can be done.

**Radiotherapy**

Few tumors are more susceptible to its effects of radiation; they may completely disappear under its treatment. However, more often it is followed by death from anemia. The usual, in the original growth sentence, is that it becomes increasingly frequent earlier.

But radiotherapy may help it is check for quite a long time. This extreme radiosensitivity is a fact of great diagnostic value. The lymphatic, especially lower, responds even more readily, but as a rule this group is characterized by its sensitivity. Actually, this tumor did 'melt away', like snow, and it only remains to be seen in the small.

How successful or otherwise radiotherapy can be in dealing with the recurring lesion. Unfortunately, no permanent cure can yet be hoped for.

**Prognosis**

Reticulum cell sarcoma is a progressively fatal disease, death usually occurring within 2 years. Extension in the earlier stages appears to be exclusively by way of lymphatics - by this means it may reach the thorax and even the abdomen. But as the condition advances, blood borne metastases develop in many tissues. At Ph. secondaries may be widespread but are too small to be recognized except by
Good.
more.
microscopy. I should think it is likely that blood spread has occurred in this case, although there is no evidence yet. They will manifest themselves later if the patient lives long enough.

High significant correlation has been found between the mitotic count in biopsies of lymphosarcoma, the incidence and mortality from the tumor after biopsy. Mitotic count might prove to be a valuable aid in diagnosis in these cases. The following graphs were published by Case in A.T. Cancer.

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**Graph:**

- **X-axis:** Months after biopsy
- **Y-axis:** Percentage mortality from lymphosarcoma

- **Graphs:**
  - 12-15 mitoses/1000 tumor cells
  - 4-11 mitoses/1000 tumor cells
  - 0-3 mitoses/1000 tumor cells

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**Theoretical Doximity Relationship.**

Although mitotic count has not been done in normal tissues, there were numerous cases from the above proposition is very bad. However, this does not take into account, we hope this case will prove it to be a considerable length of time.

This is a good case to exemplify the statement:—

"The physician should always accept with reserve a diagnosis made merely from microscopical exam of an excised lymph node. The whole clinical and radiological picture must be taken into consideration."
Mr. John Herbert.

Peptic Uleer.

CASE IV

Admitted 3.2.4.
Discharged 24.2.4.
To Ashley House.
Ward 11-12.
Name: Mr John McRae
Age: 34 yrs
Occupation: Lorry driver
Address: 11, Kilmorey Terrace, Rutherglen.
Date admitted: 3.2.47
Recommended by: Dr Cockrane
22 Bridge Street, Rutherglen.

Complaint: Pains and vomiting after meals.

History: His history goes back a long way, and he says he has had abdominal trouble for as long as he can remember. It was very bad in the late thirties. The pain is in the epigastrium, and it is present 30 minutes to 1 hour after every meal, relieved by vomiting, also by taking food or alkali. Certain foods make the pain worse, especially fried and heavily cooked foods. He dislikes meat, vegetables, and cannot eat cabbage or Brussels sprouts. He finds he can 'chop' the food, but 'slices' are not good. In salad the lettuce is the worst. Fish also causes pain. The pain is not described as 'steady pain', but is never hungry during an attack. Nevertheless he eats frequently to prevent his hunger becoming acute, because when he does get hungry, he eats a large meal and immediately gets pain after it.

The pain is situated in the RQ of the midline in the epigastrium. It sometimes radiates round under the right costal margin to the back. It occurs after every meal at present. Such attacks of the pain last for 2-3 weeks at a time, then he would be free from symptoms for 3-4 weeks. In 1939 he had appendicitis. The pain had subsided as usual after 3-4 weeks, but got no relief; the 'ke' pain became very acute, spread all over the abdomen. He was operated on the same day. After the operation he was set free to the Asylum, Ayrshire. During the following year he alleviated his 'diabetes' in Kinghorn. His period of suffering from bouts of pain relieved, but no pain or sickness. He was off work at.
Mr. Kuie. In 1940 he joined up with the Engineers. After 2 weeks he was sent to a military hospital because of sickness again, and in 2 weeks he was invalided out.

He then worked as a timber draver, his previous occupation being in the shop assistant. The pain of sickness occasionally caused him to be off work. Where he worked, his work was done by a distance driver, but away from home days at a time.

However, he was soon changed from his job to a light local delivery.

In Sept 45 the pain continued much the same, but the sickness showed a coffee ground appearance. After every meal he vomited, either a pint or more, and never food ever at previous meals. For a couple of weeks he had already been vomited up. The attacks lasted 8 to 10 days; he was then off for 3 days. The attacks were not accompanied by diarrhoea, which he was confirmed. Sometimes he has been diarrhoea without sickness or fever. Alto since Sept 45 he has vomited on almost every meal.

Mr. Kuie told me he was very weak.

Since 1940 he has been eating himself, and has been taking Bannan Suppo no. 2. powder, sultane and rice. The pain is never during the night, but Mr. Kuie wakes him up. Never ate any Kuie has been known to change in the colour of his stool.

Past history. There is no before his perforation. Also acute attacks after the operation.

Tuberculosis of his back in 1944 which lasted 6 months. It cleared up after he had his upper back cut. He has not received rice. He had bronchitis quite often as a child - has always been radical to be cory, but has he attributes to smoking. As he
says it has improved since he stopped. Keen and to make a good deal, but stopped 3 weeks ago. He drinks very little.
He has never been particularly susceptible to colds. Has never noticed wheeze or has sneezing. He is a very quiet person. He is not a coffee drinker.

Operation for tuberculosis of eye 3 yrs ago.

Apart from his trouble he has always felt well.

He has had a cough and cold since 9 yrs ago.

Speech - until Sept 15, he was quite normal.

Writing - normal.

Family

Mother is alive, well & a very nervous, anxious person.

Father was killed in the last war.

Married. Wife & 2 children. One 13, 9, are well.

Examination

4.2.42

General

Fairly healthy looking man. Of good build. He is a conscientious type of person, and is very cooperative.

A.S.

Tongue: White, fleshy.


Respirations: Healthy.


He a: Upper and lower lobes are clear.


N.S.

Pupils equal, react to light.

All knee and ankle reflexes present and equal.
Weigh: 118 lb. 41/2.

65%.

Greek: 340.

Necropsy: Necropsy.

Stomach: There was excess free fluid.

Duodenum: There is marked deformity of the 'cap of the duodenum with a point but no cure.' Appearance suggests some obstruction.

F.T.H. 5.2.47.

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<th>Total Acid</th>
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TREATMENT.

Pre-operative:

Stomach: Carried off the day before the operation.

Med.

H.L. Glycerin q.s. 7 9 am.

Hosmerin q.s. 1/50.

Blood.

1 pt whole blood pumped. Was transfused. 10 am.

Operation: 2.2.47.


R. pararegion incision was made, excising the previous scar. The incision extended from just below the R. costal cartilage to a point 1" below the umbilicus. Bleeding points were caught, and hemostasis secured by diathermy. The skin edges were protected in towels. The structures delivered into the wound. The gauze tampon was lifted up. A drain was made 1/2" below the gauze. E. gauze and a lead introduced into the lesser sac and vessels.
Summary: The greater curvature from the epiploic adherences were all divided. Updated the R. and S. of the epiploic adherences, themselves were divided. With the hand in the lesser sac, the greater curvature was entirely freed for transverse colon. The fingers were probed behind the pylorus. The head of the duodenum which were thus isolated from the pancreas. The ulcer was seen on the anterior wall of the duodenum, just distal to the pylorus. It appeared as a white scabbed area & once the anterior perforated tissue around it. The pylorus was divided off the pylorus-duodenum. The gastrocolic omentum was divided between the ulcer. The first part of duodenum was mobilized. Was divided between 2 clamps placed 1” to the R. of pylorus. The exposed mucosa was immediately smeared i spirit i ointment. An indwelling tube was seen just divided to the head of section, 1.5” upper margin of the duodenum. The distal end duodenum was closed with continuous catgut suture & buried in purse string suture. The pancreas was then stitched over the stump of the duodenum. Indwelling tube was placed in the suture. The lesser curvature was divided along the lesser curvature. The entire loop was taken behind around the stomach. The organ was brought forward & buried over to the left. The gastrocolic omentum was divided just proximal to its division into 2 main branches. After the azygos had been divided, most of the stomach was delivered. A tying & occluding clamp was then placed on the stomach from belo upwards to the R. of the point of section. A crushing clamp was then applied distal to the occluding clamp at the level of the gastrocolic omentum. The greater duodenum was grasped. A selected loop of jejunum was brought thus. A & sutured to the stomach & an
Ulcer
(complete size)

Corroded areas of
small ulcer base.

Inflamed fibrous masses.
imperistaltic fashion. The loop was clamped with a clip
oclusion clamp. Traction was placed on the clamp, and the clamps were
pushed approximately the walls of stomach to jejunum. The
stomach was then divided proximally to the clamp. The
mucosa was then swabbed. The incision was made at least
5 cm from the end of the stomach was then made in the jejunum
parallel to its lumen. The ends of this stitch were left free.
Then a running stitch through all the layers from L to R
back again from R to L, to rejoin the mucosa.

Another piece of catgut was then tied to the end of the bow-
tender. This stitch continued round anteriorly, thus
completing the anastomosis.
The margins of the lumen of the transverse mesocolon were
then sutured to the wall of the stomach immediately above
the anastomosis - this to prevent any future perforation.
The end of the suture was tied to the suture in the
clamp of one end containing the gastrocolic.

Appendectomy.
The appendix and appendix were delivered through the
lower end of the wound. The remainder was packed off
with saline packs. 2 clamps were placed on the
appendix, dissected, divided, lacerated. Lifeline
division of the base of the appendix. The stump was
then sutured by an invagination of the stump into an purse
sutured. The caecum was returned to its position.
The wound was closed without drainage.

Summary. Partial gastrectomy, pyloroplasty, with retro-
spective anastomosis of jejunum to stomach.
Appendectomy.
Omorpo 8\% 12.30; 4 pm - 9.20 pm.

Plasma IV. drip. Omorpo 8\% 12.15am. +

Patient feels pretty miserable. Slight Fever.

11.1. Sodium bicarbonate p.3. Omorpo 8\% 10.40 pm.

Today, he's feeling a little better, but no wind or epigastrian repit. Never allowed fluid or food today.

12.2.47.

Is having difficulty in passing water.

Sym p. weii, i.e., but he had to be catheterised.

13.2.47.

Some of the clips were taken out.

Yesterday, today he's been much troubled with diarrhoea. Swell. Frie, opii m Fr.

Nausea is still present, but less severe.

Patient is feeling very much better, looks well.

Stitches - abdomen of clips out.

DISCHARGED to Bette, A"erie.

- IV. fluids were given for the first 48 hrs. after operation.

For the 4 days following operation, the fluid balance was a positive on the weight side. The patient couldn't pass water until the 12th, and probably due to the "consequences drains which leaked off the line", by which means lowered the urine water.
**DISCUSSION**

The diagnosis is of no difficulty, i.e., a case presenting such a history as this. A long history of episodic pain, coming on after meals after an interval of 16, relieved by vomiting, taking food or alkalies, and recurring definitely periodically — all classic. Such is typical of peptic ulceration. The period of true clamps between the taking of food and the onset of pain is often helpful but not always definite in diagnosing the position of the lesion. Here it is 2 hours, a short enough time to suggest gastrinoma. It is probably explained by the fact that the stomach is hyperemic in postprandial condition and very quickly from purely clinical grounds this ulcer is almost certainly duodenal because we have here the triple rhythm of duodenal ulcer: food, comfort, pain; as opposed to the quadruple rhythm of gastrinoma: food, comfort, pain, comfort. The pain radiates to the R. appendiceal region of duodenal ulcer, and its situation is to the R. of the midline.

Examination papers were requested. The diagnosis of duodenal ulcer was confirmed by his previous operative history — by x-ray picture — which showed an ulcified ulcer, and an electrocardiogram of the cap. A course excluded gastrinoma.

Firth demonstrated a very high acidity in this case.

Consider the symptoms in more detail:

**Pain** is due to the opening of muscle — to vigorous contractions of the stomach, hence its relief by food. Sensitivity to this pain is increased with presence of hyperventilation of duodenal ulcer. The threshold is lowered when there is hyperventilation. For this reason, he has pain at rest. When the ulcer is active, the pain does not radiate, straight through to the back, and thus does not suffer penetration of the ulcer into the pancreas or other posterior structures.

Vomiting is partly reflex and partly due to retention.
were due to stenosis proper. In these, there would be no demonstrable vomiting along with the sensation of pain. The vomit would indeed often escape smell and color, and the spareship would almost certainly be elicited. The vomit is really due to the pyloric spasm. Now there may be some suggestion of stenosis. That the vomit is partly reflex is assumed because it occurs in each attack of pain and is presumably pre-capitated by the inflammatory condition of the gastroduodenal mucosa. For an active ulcer is practically always associated with some degree of submucous inflammation; and when gastric mucosa is in this state it cannot digest food and therefore rejects it.

Anomalies. This has been consistently present during attacks since age 15, but it is smaller in amount. The patient never noticed any melena. He has almost certainly been present not only because of the likelihood, but because he also suffered from diarrhea during these attacks. Blood is an irritant substance. Often productive diarrhea. Though the bleeding may possibly be due to the chronic gastritis, I think it is most likely that it has been coming from the ulcerative area—which is an important point in the consideration of early operative treatment, because there is a likelihood of hemorrhage which is always more severe in duodenal than in gastric ulceration.

Now there are the clinical features of the lesion in this patient. He has been born and to the naked eye peptic ulcer, as seen macroscopically, at the operation. Microscopically, the lab. A fairly large ulcer is present on the inner wall of the duodenum surrounded by much congealed and encrusted tissue. There was hemorrhagry of the pylorus, in part due to fibrosis, but mostly because of the swelling in that region. This was not present on naked eye palpation, but histologically it is seen to be the 'seat' of chronic gastritis.
It has been said that a duodenal ulcer should only be diagnosed when an ulcer crater can be demonstrated by x-rays. This was never seen but no crater or niche was seen.

I should think it could have been demonstrated by lateral or oblique views, even though it was at the anterior wall, which of course would be the reason for it not being visible on AP picture. However, with the symptoms presented, I have stated that the craters marked definitely. I think this was sufficiently justified in diagnosing his presence of an ulcer.

There is no real differential diagnosis so the surgeon could give the course of symptoms of this ulceration. The question of chronic gastritis comes in, not as much as a differential but as a contributing factor and it is difficult to know how large or how much of the symptoms can be attributed to it. Hyperchlorhydria is present in early chronic gastritis, at the mention in question, I think this gastritis is purely secondary and that it is a possible source of the bleeding but not the most likely.

Dr. Xray, approach was seen at the beginning of the ulceration, found at operation to be duodenal ulcer. This was small and unlikely to give rise to any trouble. Furthermore, the symptoms of ulceric ulcerations cause are usually of abdominal flatulence, substernal or epigastric pain, but unlike ulcer pain it is worsened by taking food.

"Let us not look to the cause" I believe there is probably more than one cause: these factors of all the theories put forward, some are obvious, applicable here, while others are excluded because this area is found as a fact. We have here the common factors of sex and age - among male callers.

The production of an ulcer here is first destruction of the mucosa, and second state is brought about by the action of the gastric juice injuring the mucosa. The problem is studying...
peptic ulcer problems never solved. One has to understand why the initial lesion occurs, in order to explain why the ulcer persists or recurs.

Verdelising factor. There is no history in this man's family of "stomach trouble," but I think we can include under this the "verdelising" factor. The patient himself is a very nervous woman. Thay are other members of the family of the same disposition. Perhaps peptic ulcer is a part of a manifestation of this same type of personality. The patient herself is not nervous, in spite of worry about things too much. The nervousness.

The nutritive factor. There are other cases of an erosion following indigestion. I don't think it is the "sterilisation" factor in this case. He never eats raw or irritant foods. He never eats fruit, vegetables or spiced foods because they make him feel worse. For years he has existed on a diet minus any appreciable amount of roughage, yet he has not succumbed. The amount of alcohol he ingests daily with which he drinks it, almost excludes this as a factor. One should give his diet carefully, one notices a definite lack of vitamin C. He eats sufficient protein in the form of meat, fish to supply this. All the other amino acids, minerals, vitamin B, his vegetables etc. for supplying this but the exclusion of fruit practically all vegetables from his diet, and his preference for bread make his problem means that he C is lacking very low. It is possible that this contributes to the chemistry of the ulcer, making its healing power somewhat. This man has been a fairly heavy smoker, for some stopped recently. The results of studies made on the effect of sterilisation show that lower contractions are definitely abolished by sterilisation, that the stomach empties more in a specified time, and that the gastric acidity may be reduced. There is also basis for the opinion that cigarette smoking is harmful to patients with peptic ulcer or duodenal ulcer.
Other than that, the effects are secondary, if any at all. To quote the work of WILF, WILF is conclusive in his demonstration of the fact that peptic ulcer is not necessarily due to hyperemia, hypersecretion, hyperacidity. Hypersecretion in a state of parasympathetic overactivity. No ulceration is possibly produced by sympathetic overactivity or stimulation. Experimentally, it has been shown in peristalsis of the stomach that the state of fear or anxiety, or the injection of adrenaline, causes a great increase in the gastric muscle, contraction of the pylorus, vasoconstriction and diminished secretion—a state incompatible with ulceration. Furthermore, if a person is consequently allowed to be a cause of ulcer, the possibility of all of his blood supply to the stomach will not produce necrosis of the mucosa?

**Focal Infection.** Acute or chronic, cases of certain shaves of sepsis most definitely, has an effect, especially for the upper part of the alimentary canal—being blood borne. In this case, we have a definite history of upper respiratory tract infection, case attacks of diarrhoea—absence of fibrous tissue clearance up after the removal of fibres. Thus, the controversy appears unnecessary; it may still be the source of infection, I think he would have been better to have had his tonsils out after the second attack of diarrhoea.

Wherever the cause of the initial necrosis of the mucosa, the life and content of the gastric juice is undoubtedly. The decidual factor is the production of an ulcer. The first part of the duodenum is the commonest site of ulcer for it is constantly exposed upon by the acid gastric juice; the bile - pancreatic juice are important factors in producing alkalinity, yet the cancerous renovation constant 3.3 acid gastric juice - as there is here, seen by the test paper level. The treatment of peptic ulcer is that of the gastric secretion which is the essential
factor. The surgeon accomplished this by removal of acid-bearing parietal linings, or by doing a short circuit op., enabling the bile alkaline percreter secreted to repugnate into the stomach.

To summarise the clinical factor was - ulcer diabetics; local infection; possible dietary factor. High acid level in the stomach.

The grounds on which surgical treatment was undertaken were:

1. Chronicity of ulcer, with failure of pyloric spasm to clear up after adequate medical treatment. Medical treatment has not been adequate recently - he has not been in bed, but previous attempts did not prove successful.

2. Previous perforation.

3. Haematemesis, which kept shifting of patient might have become more severe. Beneath the formed duodenal ulcer is much more likely to be fatal than that from gastric ulcer.

The preoperative treatment was to clean out the stomach by lavage, to hydrate the patient to reduce his acidity with water, to give blood transfusion.

Of the surgical methods, there is a choice of operation - partial gastrectomy, gastrojejunostomy, or duodenostomy. The less common methods of pyloroplasty, physiologic gastrectomy. A brief summary of each will indicate its uses, advantages. The first place one must take into account is the results of the FTN. Here he curve was right.

Gastrojejunostomy is not indicated. It has been done previously in this type of case, but with poor results. When ulcers occurred readily, the indications for pyloroplasty were not indicated. In cases of pyloric stenosis, the less acid secreting pyloroplasty, has a very limited field and is practically reserved. For ulcers which kept recurring irreplaceable to medical measures, are found of operation to be small and
Frey's operation

1. Mobilize pylorus +1/2 duodenum
2. Make an ample stoma.
   If ulcer is found
   in anterior wall
do duodenum
   it is excised as
   much scar
   tissue as possible.
situating anteriorly close to the pyloric sphincter; here being possible involvement in inflammation or adhesions. "It is highly unlikely to meet such a case." By the time there is unexpected reason for surgical measure for ankylosis lesions here is almost bound to inflammation adhesions. Uncertainty was still possible in this case.

Restroduodenectomy: The classic sound principle of Fundus operation, which is really a pyloroplasty, is a good example. This is completed, overcome - free depuration of cellular juice can occur into the stomach neutralising the acid there. The results are much better than the other types of pyloroplasty, but from the perspective point of view it is difficult, and in contrast, indicated when there is much inflammation or adherents to the posterior peritoneal ulcer. It could not have been done in this case. Even if it were, the results are not so satisfactory as here to partial gastrectomy.

Partial Gastrectomy: This is the operation of choice for duodenal ulcer. When operation is indicated, certainly in this case, relatively, hardly patients of early middle age. Lipidic duodenum. There is no readily formidable procedure. He results achieved by simply removal of the inflamed portion. It is far superior to gastroenterostomy, so it does not cure even partial is suppressed from duodenum.

The object of all partial gastrectomies is to remove an extensive area of acid-secreting portion of stomach, along with ulcer, where possible, and to restore the rest of the continuity of the stomach, by making a new opening between stomach and duodenum posteriorly. Jejunum: the latter is coved from the previous point (acid).

All partial gastrectomies are based on the principles of the Billroth method. The modern Billroth I operation is named after Pyga, and it is the Pyga's posterior short loop method that was used in this case. The Pyga
operation has been described. But there are various differences in technique. As well as the vessels in the superior mesenteric artery, the veins also contribute to the superior mesenteric. This preserving the blood supply of the jejunum, many, following Pringle’s preference to divide the vasa recta through the superior mesenteric vessels, divide the superior mesenteric arterioles. There seems little point in preserving the supply from the gastroepiploic arteries. There are points in favor of both the method of Kocher, abdominal resection. The whole transverse colon is the most, or a short loop of proximal jejunum can be employed.

Another technical point is whether or not the whole cut end of the stomach should be utilised in the anastomosis. If the stomach is very long it is better to close the top portion. For the average case between the whole cut end of the stomach is ligated into the side of the jejunum. The suspension of the jejunum to the duodenum. The jejunal loop is closed, or completing the anastomosis in the lower half of the stomach. The proximal jejunum is sutured to the closed upper part of the stomach. Hereby reinforcing the curvature line. The same line will pass through the ileo-caecostomy. A small jejunal loop will now tend to be well epithelialised.

The outlet of the stomach. The proximal loop of jejunum. This provides a shelf, allowing the stomach to play part in the digestive process, prevents the dumping of food straight into the small intestine. Stored thick bile is not morelipolysis of these 'adventures', for if the resection is adequate then can hardly be secured scope for digestive process.

From such differences have arisen the various named modifications, of this operation: e.g., Pringle’s modification.
Arterioshipersed
in Physiological
Sclerosis
The Billroth I type of repair is a Gastroduodenotomy.

It is performed much less frequently than the Billroth II because firstly, the surgeon must be experienced in the operation, which is very difficult, and also, it is not applicable in cases showing much duodenitis. The duodenum must be well freed and the suture prepared most carefully. After anastomosis the patient should be free from pain and shivering.

Recently there has been criticism by some of the surgeons implied by the term 'partial gastrectomy'. Some surgeons remove 1/4, others 1/3 or 2/3, and results have not been correlated according to the amount of stomach removed.

In a series of over 500 cases of chronic gastritis - duodenal ulcer has carried out the operation of measured radical gastrectomy. The measured amount of stomach left behind is 1/4" lesser curvature. 2/3 of greater curvature, but more rigorous than this is the division of the vessels - above or below the greater curvature except the highest one of the vas brevis. His object has been to prevent the occurrence of ulcers & ulceration, for the recurrence rate, in half the control portion of gastrectomy is 5-3% (Haller); and in two-thirds of the ulcer, 3.7%. The results are good and the mortality low, but the significant feature is that whereas the mortality in the last 430 cases was 3.7%, that in the previous case was accounted to 12%. As with all major surgical procedures, once a trained team concentrates to perform an operative procedure so the mortality falls as practice is gained. But at the whole one is justified in performing the usual partial gastrectomy, for the recurrence rate over most series, is shown to be very small.

An unlikelihood feature of the measured gastrectomy is that it has been found that prior to the extensive de-vascularization, in which resection, ulcer formation does not result from acid secretion in these cases in which he pylorus is left intact. At this point I urge you, consider the de-vascularization method of Sauerbrun.
Physiological Gastricotomy.

Sennett's technique is to ligate 96% of the vessels going to the stomach. Five out of every six of the small vessels which pass from the gastroepiploic arteries to the stomach wall are ligated—so far up the vessels' curvature as possible.

The staple of vessels in the lesser curvature is ligated in 1876.

The arteries at the pyloric region are left. Vessels are ligated also on the posterior aspect. When the arteries are tied like this, an immediate and considerable drop in acidity occurs, and the majority of failures (Sennett's cases) are due either to insufficient arteries having been tied, or to the biopsy making along with the cauterization, whereas arteries alone should be ligated.

In many of his cases a gastrectomy was performed as well, but he results were no better. In cases where ligation alone was performed.

The operation left the acidity at normal levels. This persists for at least 5 years and the later results seem to be satisfactory.

However, in Queen's hospital he operated on a series of cases and here, though he showed a remarkable drop in acidity at first, they were not satisfactory, i.e. the acidity returned after about 5 years—presumably due to the re-establishment of circulation. On account of the fact that sympathetic nerves enter the stomach along the gastri arteries it has been suggested that the effect of tying the arteries may be due to simultaneous interference with the nervous mechanism of gastric secretion. This suggestion is probably wrong, for the sympathetic is not concerned at all with secretion.

Also the sympathetic fibres would regenerate very quickly.

Up to the present the Sennett results have been confirmed in the ordinary, but it will need many more trials before it can be said to be an operation that will show results.

Vagotomy—here more the psyche has come to be recognized as one of the main physiological factors in peptic ulceration.
Achilles thalpe or hypophysis. The vagal centre is stimulated and this can cause increased gastric secretion, but cellular action is not the only factor. The ulcer itself may cause deep stimulation of the vagus.

Now normally, the acid secretion is produced by vagal stimulation and by hormonal stimulation, and the main response is to food. But the flow of gastric juice which forms the ingestion of food is relatively harmless, for H. pylori contains much titratable acid, it does not cause a high level of H. concentration or account for the buffering action of the food itself.

In peptic ulcer, a subjective secretion level of acid is very high. High right secretion is the indication for operating, provided the patient also shows a positive 

The earliest attempts at vagal resection were all complete, operations in which branches of the vagi were cut as near the spread nerve over the cardia. The results were not entirely satisfactory, because of this.

Then another approach was tried in the belief that the nerves would be easier to see and cut, but operation have returned to the partial approach. Resection of the fibres is carried out from below. The posterior thicken in the heart being united - because it does not always be the posterior aspect of the esophagus - frequently being found hidden by connective tissue beneath it. However, the results can easily be assessed for operatively by the funnel test, which in successful cases is negative.

The operation is not old enough for long term results to be studied. It certainly achieves the aim, by diminishing the refux, as well as the acid secretion: but it may be that the parasympathetic fibres will in time reach the fundus, either by regeneration, or by new pathways.

To summarize, one may say that all present partial gastrectomy is the best treatment for chronic ulceration; for those new and improved methods are forthcoming. These are still in the experimental stage, and good results are really only obtained by those practised in the method.
Initial diagnosis is excellent for there have been no complications in this case. Usually, gastric obstruction may occur due to pyloric stenosis or other causes. The pylorus may become partially or completely obstructed, leading to symptoms such as vomiting, nausea, and abdominal pain. The symptoms are often relieved by pyloroplasty or other surgical procedures.

When considering surgery, the patient's age, general health, and the duration of symptoms should be taken into account. The success rate of pyloroplasty is generally high, with most patients experiencing relief from their symptoms. Post-operative care is crucial to ensure a smooth recovery.

The recurrence rate following pyloroplasty is small, especially if the pylorus is resected. However, pyloroplasty is a major surgery, and complications can occur. It is important to monitor the patient closely post-operation and to provide adequate follow-up care.

The outcome of gastric surgery is not always entirely successful, and complications can occur. It is important to consider the patient's overall health and lifestyle when deciding on a treatment plan.

In summary, the initial diagnosis is excellent, and the patient's condition is improving with proper care and management. It is important to continue monitoring the patient for any potential complications or recurrence of symptoms.
Slovak removed has no constant relation to the development of disease. It is not a common complication.

Nothing definitely can be prophesied, but it is hoped that the doctor will find a large number of those who remain free from complaints, and that for his advice and the surgeon he does not interfere with another ulcers.
CASE I

Mrs Alice Eddie

Tubal Abortion.

Admitted 18.10.46
Discharged 30.10.46.
Name: Mrs Alice Blackie.
Age: 32 yrs
Occupation: Housewife
Address: 187 St. Leonard Street, Edinburgh.
Birthplace: Edinburgh.
Recommended by: Dr. Sco. 41 Bellevue Crescent, Edinburgh.
Date of Admission: 18.10.46.

Complaint: Lower abdominal pain.

History:

Eight days ago the patient was doubled up by severe acute pain in the right iliac fossa. Three days later she went to bed, where she has remained. The pain has been severe and continuous ever since its onset. Occasionally it becomes more intense. The patient has not been able to eat. She consulted today, and was on the third day after the onset, but only fluid was brought up. During the past week she has been eating regularly — skip only light food. Pheels feels to make the pain worse. The character of the pain she describes as ‘drawing’. Relief in the first instance was in the right iliac fossa. She pointed to the foetal position. Pheels relieves the pain.

Bowel Regular and normal except for some diarrhoea yesterday.
Uterus: She has frequents, but this has always been present. There is no pain on palpation.
Periods: Her last period started four days before the onset.
Of the pain. It ceased last same day, then started again later - and this was coincident with the onset of pain.
There has been no vaginal discharge.
Apart from childhood diseases, there is no history of any illness.

EXAMINATION

18.10.46.

General.

A pale woman, skeletal build and lighter in. She is not very cooperative.

Heart, lungs.

Breast: firm.

Abscesses: have quite freely, a respiratory. There is no visible mass and no visible peristalsis. Bowels can be heard.

On palpation: There is marked hardness of the whole of the right rectus muscle. Also of the muscles in the right loin. Deep pressure over the colon on the left side gives pain referred to the right iliac fossa. There is acute tenderness over the Blumberg's point, and in the region of the right tube. There is also tenderness in the right loin. There is no palpable mass in the abdomen.

The liver and spleen are not palpable. nor are the kidneys.

P.R. Tenderness, right up to the right side.

No vomiting. Vaginal moist. Corrugated looking.

Right tenderness in left lateral formix, and extreme tenderness in the right lateral formix.

Urine: N.A.D.

W.B.C. 9,200.

Cerv: C.V.S. N.A.D.

Temp 99.8° F
Pulse 88/min
Respiration 20/min

PROVISIONAL DIAGNOSIS. There was divided opinion between:

{ Acute appendicitis, and
Tubal abscess.}
TREATMENT.

The same evening a few hours later, operation was performed.

The medication of Morphine gr. 1/4
Hyoscine gr. 1/100

OPERATION.

Dr. McConnell.


Skin incision. A right paramedian incision was made.

Blood vessels were clamped and ligated. The external oblique was divided in the line of its fibres. Illiac obturator and transversus were split in the direction of their fibres, and when peritoneum was opened appeared dark blue-green color. On opening the peritoneal cavity, thick dark blood was found, this was dressed as far as possible by suction. loops of small bowel were brought out of the wound. On the resection border of one loop was a contracted area with a reddish inflamed appearance, to which were adherent some small clots of blood. The appendix was small and normal in appearance. At this stage the incision was extended downwards by cutting across the fibres of illiac obturator and transversus in the line to the iliacal border of rectus muscle.

On palpation the right tube felt swollen. The left tube felt enlarged normal, and the uterus was enlarged.

The right ovary was delivered into the wound. It was small, pale and not pathological. The right tube was seen to be very swollen tubularly. The friable clotted end was filled with a mass of blood clots.

This friable clotted end was caught with forceps and the rest of the tube examined. The medical head of the tube appeared normal. The patient was then put in Trendelenberg position in order to facilitate the operation. After the removal of moderate-sized clots from the peritoneal cavity, the tube was clamped near the ovary, and the mesovarium was also clamped. The ileocecal herd
The tubes were excised, and the free end closed with a transfixion suture. The mesovarium was divided and ligated.

The right ovary was left in situ.

The peritoneum was closed with catgut. The vessels were stitched with interrupted catgut sutures.

The skin edges were approximated with a silk weavable stitch and nickel clips.

A dry gauge dressing was applied.

**Summary:** R. partial salpingectomy for tubal abortion; sound closed without drainage.

**PROGRESS NOTES:**

29-10-46.
T emp 97.6. Feels very uncomfortable.
Actus cena. Cascara gue. 

23-10-46.
She feels much better, except she still looks pale.

Clips out.
Ht 60.0.

24-10-46.
Stitches out. She is looking much better and feels quite well.
Ht 74.9.

**DISCHARGED.**

25-10-46.

Report of bacteria: Streptococcus haemolyticus. A few epithelial cells only. No pus cells or organisms seen. No growth in culture.
DISCUSSION.

This is a very interesting case, and misdiagnosed perhaps because of the absence of any mentioned irregularity. The patient was not very cooperative, but as far as could be made out there was no period of amenorrhea.

The history obtained was of some slight irregularity of the last menstrual period. At the time of this period, we have a case of acute abdominal pain on the right side starting in the right iliac fossa, and remaining there for 10 days. The condition to be considered are acute appendicitis, poliomyelitis, tuberculosis, twisting of the appendix, an ovarian cyst, degeneration of a fibroid, suppurative ileitis, and some conditions such as tuberculous peritonitis, loss of menstruation, intussusception, dermoids, pyelitis also, pyelitis, bladder diverticuli, ulcers etc.

Many of these conditions, except the latter, are usually considered as an attack of acute appendicitis. Because a condition of a common condition in which the pain is more likely to be found. A rare condition, this is the first case to be considered.

The diagnosis is very difficult of an attack of acute appendicitis. It is a typical case of inflammation which gives rise to initial pain in the R.I.F.; but; in true appendicitis, usually, abscesses, and the patient does not come in for operation. It may however go on to give signs of irritation of the parietal peritonitis, but it is seldom that cases of true appendicitis have sudden acute pain which is unremitting.

Acute appendicitis is the first symptom in
epigastric pain, 'chicky' in nature. The order of symptoms in appendicitis is all important in the diagnosis. Sudden pain, nausea or vomiting, localized tenderness in the R.I.F., fever, leukocytosis. However, the symptoms vary according to the position of the appendix and this is an important point for the initial pain may be felt in the right iliac fossa when the appendix is retropos- ceeled in position, though this is not by any means the rule. Vomiting generally occurs early in the attack and in coincidence with the chicky pain, vomiting is not so frequent with retrocecal appendix. From the history of acute pain felt in R.I.F. where it has remained in its severity for over a week, it suggests that the under- lying process is one of inflammation of the peritoneum. If none of the peritoneal condition remains unchanged and the pain, then this peritoneal must either have localised, or been caused by a substance free from bacteria or toxin. If the peritoneal had been caused by perforation of the appendix with peritonitis, obstructive signs of acute had they were passed unobserved, then one would expect an abscess to have formed by this time. And if it were the case always would be found. Not only would a mass be palpable abdominally or P.R. but there would be a raised pulse with or without a high temperature.

The local deep tenderness in the position indicated by the patient—over the R.I. area, points: from these demarcated area, and the muscular rigidity which itself was fairly generalised, does not point to a pelvic appendicitis. The early symptoms of a pelvic appendicitis are pain, epigastric pain and nausea at the onset, or perforation of the appendix this pain disappears. The local pain is slight and there is no rigidity—because of the relative insensitivity of the pelvic peritoneum. Neither were
Here any symptoms of pelvic irritation of bowel or bladder. Only in the acute type where the peritoneum is spread up can it give a picture any thing like this.

The pelvic peritonitis in this case is the uncharpable cause of the pain. The situation and the pelvic peritonitis is in the same part and in presence of the appendix. Considering this appendix does not seem like likely diagnosis.

Pyelitis. The absence of urinary symptoms and of high temperature makes this only a fleeting consideration. Confirmed by the negative findings on urine examination. Malignant hydroperitonitis is a possibility, but is seldom startlingly acute; the pain is localized in the flank and palpable mass felt.

Carcinoma or tuberculosis of the ileocaecal junction. The obstructive symptoms appear earlier. pain occurs.

R.N.F. There is severe vomiting simultaneously with this, and the pelviis is usually constricted. Also, it is usual to have a history of previous attacks.

Similarly, the history excludes perforated ulcers. It sometimes occurs with no previous history of intermittent, but this is rare. Pelvic visceral contents give rise to peritonitis which unless localized around the iliac becomes generalized.

Supportive deep pelvic pain. Always is present. A primary sore is to be found, usually somewhere in the lower back. Or an ulcer in the uterus is accompanied by much pelvic symptoms and effects generally in toxic manner. The pain at the back as well as the groin.

Salpingitis in the first of the pelvic lesion to be considered. There is acute pain in the upper recto-junior or the posterior of the tube. If high temperature is in the acute. bone infection is attached to a high WBC because
Leukocytosis may be extremely high in eclamptic pregnancies, for leukocytes are increased in the presence of toxemia. Similarly, the BSR may be more culpable than helpful. Commonly, the pain of acute salpingitis is felt on both sides from the uterus. Often it is felt over the iliac. The general condition is much affected, and the patient looks ill. Urinary symptoms are common, and there may be a history of a purulent vaginal discharge of varying degree. On examination, there is tenderness bilaterally with considerable rigidity. If bimanual is disappointing, the tubes are not palpable because they are too soft. Movement of the cervix causes much pain. Sometimes, there are signs of an associated urethritis.

The temperature, pulse, and white cell count were all high in this case, and the patient did not except for acute salpingitis.

Salpingitis is frequently found as a complication of uterine fibroids. No history of menorrhagia suggests fibroids, but they cannot be excluded because of it. For these on the greater surface of the uterus, which are subserous, do not give rise to uterine bleeding. Red degeneration and suppuration are two complications of fibroids which have acute symptoms. Suppuration would be manifest by general as well as local upset. High temperature etc., but red degeneration is severe, produces a picture like the one we have here—vague, subacute acute pain, which remains constant in its severity and position. If fibroids are palpable abdominally, would be palpable by bimanual examination.

Ovarian cysts are relatively uncommon and do not usually give rise to trouble. Tossoi of the pelvis is the most frequent complication, sometimes accompanied by hemorrhagelibitio, or more
rarely does rupture occur. Signs of twisted pedicle are pain and sudden onset of anemia which is characterized by urination which is more common than to find. So it is seldom so severe as to simulate an acute abdominal crisis.

**Tubal Abortion.** Of tubal pregnancy, this is one of the possible complications. When a tubal pregnancy ruptures, the result is a major abdominal crisis. Shock is the outstanding feature and will be severe. Haemorrhage and peritonitis, the patient is soon at death's door. However, in tubal abortion, the symptoms are less severe. They are produced when the embryo plus blood clot are extruded into the pelvic peritoneal cavity. Suddenly, the woman is seized with lower abdominal pain which may be severe, but she does not faint. The pain is usually crampy, corresponds to the contractions of the tube. Pain continues days or weeks. Shortly after the pain the decidua begins to separate, and this is followed by a profuse loss of blood. There is no great alteration of B.P. or pulse, but the patient looks pale. There may be a moderate menorrhea and a moderate pyrexia. The R.B.C. is not raised. Shoulder pain is frequently found.

This is what the picture presented by Dr. Edie. The typical story in this case, the patient has missed one or two menstrual periods. There was no history of amenorrhea. Here, the abortion began occurred at the time of the first period, and the decision was based on her signs for
The period which was noted. Graphically:

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14  14
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This is the order of events here. This bleed up is the spotting, being mistaken for the period.
Alternatively, conception may have occurred at an earlier date. If previous bleeding bleed up possible, being merely an "implantation bleed up" is

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implantation bleed up
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The former is by far the more likely, for implantation bleed up is seldom as great in amount as an ordinary menstrual blood loss.

The constant nature of the pain, either before a distinctly noted, means that the abortion was probably fairly near to the ovum, and that the periodical irritation occurred at the moment of abortion. Here having to be but few contractions of the tube.

Unfortunately, before the operation, shoulder pain was exhibited after the patient volunteered the information herself. Except a question, here she admitted having pain in both shoulders during her illness, particularly in the right shoulder.

Vaginal examination was inconclusive. There was a little pain in the right fornix. No mass was felt either here or in the posterior fornix (pelvic flexible). The uterus was soft and a little enlarged. Nevertheless, it is typical of tubal abortion that very little can be
feet.

Proximally, adhesions may have clutched the diaphragm had the possibility of the condition been set early, because in the region of the fingers it is thickest first, later it presents as a sensorial swellup—which gives a feeling characteristic to the touch. But in this case he’s poorly had been living a bed for a week and at the end of the line he’s blood was found, hence it would be possible to the condition.

The usual Zondek test is said to be of no practical importance in this condition. Diagnostic curettage is not helpful. Tubal abortion here appeared to be the likely diagnosis. However, because of the absence of amenorrhea, the provisional diagnosis of appendicitis was made by her own doctor and surgeon.

In a tubal pregnancy, the ovum has been developed, trophoblastic tissue embedded itself as the host of all. It may, as a matter of fact, at the tip of a fold of the mucosa—columnar epithelium. The trophoblastic tissue invades the mucosa and the host tissue. The ovum is soon absorbed by the submucosa and muscle. The ovum is commonly described as "unhurried in its bed and cling to its own grave" because no decidual is being formed. Numerous vessels are opened up. The ovum distorts the tube, and at the point of it projection into the lumen is called the capsular membrane. The tube itself is thickened and there is some hyperemia, but on the other the decidual reaction is visible. It is because of this poor decidual reaction that the early pregnancy
in hemorrhages, for separation is likely, where fœtal villi can spare no strengthhold in the maternal tissues.

Tubal abortion is the most frequent miscarriage of a tubal pregnancy, and it can only occur in the first two months, for thereafter the fœtus ripens and ceases to be patent. The sequence of events is that the capsule membrane ruptures, the blood clots or clumps come into peritoneal cul-de-sac. This is a complete tubal abortion. From what we know clinically, it may have happened in this case. But at operation, blood clots were found filling the cul-de-sac, the picture was not of a typical tubal one, the blood was not peritoneal but had continued peritoneal cavity. The blood clots must have continued for some time. It is evidenced by the fact that a considerable amount of blood was flushed from the cavity, it consisted of clots of different ages. This can be well correlated with the clinical picture.

In the majority of cases of tubal abortion the ovum is malformed, and even if it is torn, gross defects are found. So the ovum must be due early.


eidology

General etiological factors are:

1. Age, most frequent age is 25-35 yrs.

2. Previous abortion: This is of unquestionable importance in idiology - hence it is pronounced in this case.

3. Figures published show that there are higher figures for incidence, in May, August and November. This is statistically significant only so far as it agrees with recorded fertility curves.

4. The condition is more frequent in the left ovary or the relatively sterile woman.

Implantation is commonest in the ampulla, probably because of the narrower of the tube there, and for some reason it is commonest on the right side.
This case, like most, appears to have no obvious cause. The condition of ectopic endosalpinx in the tube, however, suggests the possibility of some factor or factors leading to the condition of the tube. In some cases, there have been previous operations and the condition of the tube was not apparent. There is no evidence of operation of any accessory tube, or ovary. Rigid endosalpinx has never been performed.

There may possibly have been some constitutional abnormality of the tube - focal constrictions, or diverticula. In all these cases, the possibility of a mechanical factor must not be overlooked. In some cases, the ovum adhered to the tube en its usual place, but there does not appear to be a factor.

Though it has never been proved, it is quite possible that the rapidity of the cellular division of the fertilized ovum and the activity of the fibrillation, might influence the implantation of the ovum.

In the case of the ectopic pregnancy, the uterus adheres to the ovary and the ovum. But this is not necessary as the decidua reaction will take place. The ovum, however, is not identical with the decidua of a normal pregnancy, and, of course, there are no chorionic villi. When abortion occurs, the tube is followed by a shedding of the uterine decidua; mistaken as the period.

Looking back on this case, there seems to be no obvious cause. The condition of the tube, however, suggests the possibility of some factor or factors leading to the condition of the tube. In some cases, there have been previous operations and the condition of the tube was not apparent. There is no evidence of operation of any accessory tube, or ovary. Rigid endosalpinx has never been performed.

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The indication for conservative treatment in abortion were few - mainly that the condition had been present for over a week and that there were no signs of shock, pyrexia, infection or toxemia. Operation in advisable and in many cases essential for tubal abortion. The difficulty here is that there are some doubt about the diagnosis - it is therefore, it was corrected to spastic abortion. Had the diagnosis of appendicitis been definite, I think operation would be contraindicated, for by this time it would be useless if abortion would have started.

A paramedian incision is the one for laparotomy. After mid-pubic incision was made in this case, which proved to be quite adequate for explorative medically.

On occasionally a tubal disease the pain is referred to the opposite side which would make a decision through a gynecologist very difficult.

In the actual procedure the distal part of the tube was removed. This is better than the conservative treatment of the tubes where the abdominal end is sutured and the ovum pressed out or the tube split and the ovum carefully sutured with the tube sutured. For all operations in these cases the distended tube relaxes to its normal size, it will have become permanently damaged and can no longer contract or dilate.

Furthermore it is difficult to be conservative with the tubes and yet at the same time because there was no more hemorrhage.

No dilatation was necessary because the blood was not fluid.

The immediate prepartum is excellent. General condition will rest good and is in improved her postpartum condition. Remember only after her operation.

There is no reason to suppose her. There will be
any recurrence of ectopic gestation, but when there is no obvious cause there can be no blame attached to the proponent. Moreover, the incidence of the condition is low, and hence previous tubal abortion is not a predisposing cause, and still relative sterility is equally important. These considerations relatively unimportant when we consider that the patient is only at the beginning of her married life, and that it is frequent for the results of the first conception to be expelled early in a large proportion of primiparae, whether the side of gestation is normal or otherwise.
CASE VI

Mrs Margaret Ramsay

CARCINOMATOSIS PERITONEI

\{ \text{Admitted} : 29.11.49 \}
\{ \text{Discharged} : 1.12.49 \}
History.

The patient has been getting weaker during the past few months, but for the last 3 weeks she has suffered progressively swelling of her abdomen. This swelling came up suddenly in the first week, and has remained practically the same size for the past 60 weeks. The fact that drew her attention to it is the first place was that she found she was unable to get her skirt on, and it became increasingly difficult to tie the shoe laces. She speaks of it as a hard swelling and says that her size is much bigger than a child of at least. There is no pain associated with the swelling. For the past few months the patient has not been feeling well, she has been tired, and subject to headaches, and occasionally, pain in her left shoulder.

Her appetite has been poorer, especially in the last three weeks. Swelling of both legs for ankles to knees occurred in the first week, and has become even more marked since then. It is present continuously, being as bad in the morning as it is in the evening. Breathlessness has become increasingly marked since the onset of the illness. Ordinary household duties and walking make her very breathless.

Vitulation. She has been passy for 6 weeks now, but she normally does not passy. During the past 6 weeks, she has also been constipated. Urination once daily, but this is a frequent occurrence, and takes place whenever the patient wishes a sneeze, or has to wait a little time for one.
Personal History.

Menarche: 13 1/2 yrs.
Type: 7/25: moderate; 1st period less haemorrhage.
No dysmenorrhoea.
No menorrhagia.
1st child: breech. 1-5. 7. 20th Oct. 47.

Past Medical History.

1934: F.T. 5 1/2 ft. alive, well. REPORT. Pregnancy and premature labor. No miscarriages.

Previous History. The patient has enjoyed excellent health. Childhood infection. No chronic disease.


Examination.

General. Looks healthy.

Skin: normal and healthy. No eczema or intertrigo present. Marked edema of ankles (Hb 80%). Temp: normal.

Torque: clear and moist.

Teeth: upper jaw artificial.

Abdomen: There is uniform enlargement which is very great. On percussion there is dullness in the flanks, and resonance in the midline. Fluid thrill and shifting dullness can be elicited. The abdominal walls are tense. But it is impossible to feel any mass or to palpate the liver, spleen and kidneys.

Kupfer's spots are scattered over the abdomen and chest.

CNS: Pulse regular, quick and force. B.P. 20/85 mm. Hg.
A.B.: normal.
Heart sounds pure.

Hb: 80%.
WBC: 24,500/mm^3.
Respiratory System:

Upper lobes: Expansive and breath sounds equal.
Lower lobes: Sparing diminished but equal on both sides.
Some dulness over both bases, with diminished breath sounds and vocal resonance.

P.V.: Gas can be felt on percussion. Bimanual examination is quite impossible.

B.U.N. 12 mg %.

Wave Graph:

- 30.10.47:
  - Pressure: 1.3 g w. %
  - 6 a.m.: 25 cc.
  - 8 a.m.: 8 cc.
  - 10 a.m.: 2.8 cc.

B.S.R.: 15 cc/10 cc

Pus centes: Abscesses: 32 cc o.g. with blood.


Knee jerk: The diaphragm is raised on each side.

Plural effusion cannot be distinguished. The heart appears normal. The lung fields are clear.

Eye: Abscesses: There is a rounded tumor mass arising out of the palisade, ascending the level of the brain. There is no evidence of brain invasion.

There is generalised rigidity of the abdominal muscles due to excite and dilatation. The appearances are otherwise normal.

Gastro Analysis

- 5.11.47:}

[Graph showing analysis data with columns and a time axis labeled from F1 to 3']
3.11.47.

be cream. The tumour moved with the os e.c o. a. w i h t i n.
difficult. The walls of colon were glistening and changing
pulsed in the acute fluid. It was not really possible to see
any definite relationship between the walls of bowel and
any tumor that may be present in the abdomen, but in the
abdominal cavity the sigmoid loop is seen lying free forward.

There was no evidence of any intestinal tumor of the colon.
Evacuation was fairly satisfactory.

11.47.

7 p.m. The patient was a little sick, and unable to
swallow the full meal. Esophagogram showed no evidence
of primary neoplasm, but a small paraesophageal hernia
was present, and there was some distortion of the shape of the
stomach by the colon. Gastric EM was not possible due to
partial relationship of the small bowel to the tumor.

Bell's report a gastric fluid. Abnormal material with
numerous degenerated endodermal cells, many lymphocytes,
and a few plugs, but no malignant cells. Indicated clean
inflammatory, usual disease.

11.47.

operation. Laparotomy. Tumors removed.


The abdomen was opened through a midline
subumbilical incision. There was a great amount of amber
colored fluid in the peritoneal cavity. The bulk of this was
encased by sludges. The patient in full Trendelenburg
position. The abdominal contents were eviscerated. Both ovaries
were found to be enlarged - cystic. The liver was over
the size of a large plum - cystic. It covered the tail
lobe of the pancreas. The liver and ovary were rather
harmless. The liver was considerably larger, being
about the size of a prune fruit. Parietal x x e x y x x y x x y
the cysts being larger, not so inflamed as on the R. side.

There was marked thickening of the pelvic peritoneum,
Particularly, the infracalculo-pelvic lipomi is a feature to note. The prostate appeared was generally thickened, there being a nodules on the capsule. Consequently, the bladder was about 1/2" thick and multiple mobile lumps were present. The peritoneum was thickened, reddened. No focus was detected in the bowel. Clamps were placed on the R. ovarian pedicle and the ovary removed. Vessels were ligated and the pedicle tied. ovaries sent for path report.

Summary: Cystoscopy: peritoneal. Advanced bilateral carcinoma of ovaries. Two caecae.

Path Report:

The surface of the ovary is sappy and has obviously been adhered to smooth muscle. At section, normal tissue can be seen at some points; elsewhere, the spherical mass is soft, irregular, pale, hemorrhagic tissue largely recent, and slightly encapsulated. This is tumor tissue.

Microscopically: papillari, adenocarcinoma. The surface of the ovary is covered a tumor process. The hyperchromatic epithelial cells are big up to form cavities. Nipple-like growths are seen on the surface. At the tumor area fibrous tissue spread out from these branches like a blue-quit on a red core. Attempt to form acini. This is a vigorous adenocarcinoma.
DISCUSSION.

The main symptom in this case was abdominal swelling with a galactorrhea. It was found to be due to ascites. The swelling of various causes gives certain clinical symptoms. The fluid does not shift or it does in a case, etc. The swelling so marked in the flank. A mass of fluid very occasionally be seen in the pelvis with gross ascites, but this is rare, and when present takes place of the ileus, is indicative.

That multiphasic derangement has occurred is certain. Pelvic examination excludes this is the cause.

No cause like the caeci recti perforation can produce so rapid and dramatic a picture as his: the presence of ascites. The peritoneum looks dull, and the patient is emaciated. But the ascites here is well-marked evidence of the primary growth, or of anemia and ascites.

Further causes need not be discussed for the signs of the chronic disease are sufficiently easy to diagnose. e.g., cardiovascular ascites: regional edema with tuberculous q. r. abdomen of the peritoneum is dull & adherent, and the fluid here is usually pale, milky, tuberculous, and the general picture is peritonitis of certain.

All the symptoms in this case have been closely related to the presence of the ascites.

In order to confirm the diagnosis of ovarian neoplasm, pelvic was performed, and this revealed advanced cancer of the ovary, and peritonitis.

The microscopic picture shows the presence of a papillary adenocarcinoma in the ovary. The main points in discussing this case are firstly, the presence of...
of the prostate, and secondly, whether it is primary or secondary. Both primary and secondary tumors of the bladder are relatively frequent. Cystitis tumors are found more commonly, however.

The reasons for arriving at the diagnosis of papillary adenocarcinoma: the gross characteristics are such that this is the picture of solid adenocarcinoma. Both ovary are affected, they are crowded, one considerably more than the other, and the surface is nodular. This is found in many cases of adenocarcinoma, but generally the surface of the ovary is smooth. In some, the tumor may become tough. In this case, the tumor may be bilateral. Tumors of the ovary are often bilateral, and the finding of bilateral tumors may be a common feature of very advanced cases. (But this case is advanced.) Some believe, however, that bilateral tumors indicate the origin of independent four adenocarcinoma. This is assumed because the carcinoma in primary which is otherwise not be the case. Secondary tumors form in carcinoma.

It is difficult to fix an exact date to the type of tumor here, not because the features are not clear, but because the classification and curettage of ovarian tumors is so unsatisfactory. This tumor is described as a papillary adenocarcinoma—papillary, because like the term of cystadenoma, here is an abnormal connective tissue framework. And the presence of numerous mitotic figures and marked hyperchromatism show that it is very malignant. But authors speak of only 14% of the papillary—non-papillary forms of adenocarcinoma, but also of the types of solid carcinoma with the same medullary, carcinoma simplex, squamous carcinoma, alveolar, pleomorphic carcinoma. Now these terms are
capsule for white film indicates the relative constancy of epithelial tissue present. These cells do not constitute definite epithelium, for the reason I think it would be better to use the term medullary glands or to describe different varieties of adenocarcinoma rather than classify them into different types. 50.10 carcinoma divided from adenocarcinoma it may be that there are dealing here is a secondary adenocarcinoma to which if it fact the chief pelvis organs are affected. Indeed, 5.16 if it were adenocarcinoma, in that it has come from a primary source in the gallbladder itself, probably bile pyloric. Secondary carcinoma (a peritoneal adenocarcinoma) may present bile, and be of such size that it completely overloads the primary clinically which may even be overlooked. But there is no evidence here of any obstruction to the bowel, as seen by surveying or calculating from the fluid analysis. The only possibility would be small primary growth is impaired but this is unlikely for such tumors usually present some symptoms. However, five.

The adenocarcinoma tumor is the common type of secondary ovarian carcinoma and certain features typical of this tumor can be present here. These are gross features solid moderate size tumors, usually bilateral, surrounded by a capsule and smooth, and a section. The capsule is seen to be better developed. The tumor tissue itself has a very variable appearance. Microscopically, the cells show the typical mucin degeneration. Where the growth is secondary, there can be rare, bile where the ovary might have been affected.

Transperitoneal implantation is not so widely accepted today as a common mode of spread from the ovaries. And when it does become apparent, it usually will include various stages growth from the site of the primary organ. Here, the peritoneal involvement in罕见
located in the region of the testicular organs, there is no suggestion of transplantation. Furthermore, a section of the ovary, the tumor mass is slightly encapsulated and is obviously related to the testis. Though the ovary and lymph nodes leave the ovaries, so that any lymph spread to the ovaries must be unilateral. In secondary ovarian-pelvic tumors and also the ovary via the retroperitoneal and umbilical lymph glands. The means of spread being frequency of bilateral involvement. Both would then spread rapidly affected from the common source.

Other possibilities are blood spread and direct extension. The latter being possible from the uvea or vagina, as spread from the uterine in the common carotid artery, the blood vessels in the opposite organ, possibly by blood, le uvea, or perhaps affecting it. When the uvea is affected by lymph spread the growth occurs in the uveal, or the endometrium, or the peritoneum. If the uvea is spread which affects the organs can. The hemorrhage of the uvea is a grave prognosis sign. By direct extension of the growth, the cells surface of the ovary, the pelvic organs are affected, and it in the direction of the pleurae. From both the ovarian and peritoneal spread take place along the lymphatics until the parametrical tissue becomes infiltrated. Monopithic the lymph glands lymph nodes, retroperitoneal especially mediastinal become affected. Distal metastases occur in the, so
for here is no 4 infection. Lesions elsewhere, though these may be smaller, but give rise to symptoms soon.

Postscript: The prognosis in this case is hopeless. Therefore treatment in palliative, and we must do all we can to give the patient comfort. She has been surprisingly well since her operation, and indeed operation, they give. The patient's condition is a remission. It stimulates both body and depressive processes, to some extent. The patient does not know the nature of her lesion, and thus is itself in an important psychological point, for it prevents her patient from thinking about her death, which unfortunately in near enough. Palliative paracetamol will have to be carried out quite frequently, and she will need pain relief, hopefully to be give. Death may occur from distal metastases, or perhaps from increased cachexia and dysphagia. She may be quite comfortable for 2 or 3 weeks, but it is not clear how long she can survive.