I hereby declare that this thesis was composed by me
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Subject of Thesis

Abdominal Cases

illustrating the relation of

\[ \text{Medicine and Surgery.} \]
Introduction.

In the beginning of 1892 I was asked to see an old man aged 72, who complained of pain in the lower part of the bowels and vomiting. After a careful examination of the patient, there was no doubt he was suffering from intestinal obstruction. He was carefully watched, morphia was administered, and distending enemata were given, but his symptoms showed no signs of improvement.

On the third day Mr Cathcart saw him with me, and confirmed my diagnosis.

He operated and found a loop of the small intestine partially strangulated by a band. Had the operation been delayed much longer, the bowel would have become gangrenous, rupture would have taken place, and a fatal termination in all likelihood would have followed. See Case 14.

This case suggested to my mind the question which has been long before the profession, at what stage in an abdominal case is the physician to seek the aid of the Surgeon?
Is the Physician justified in carrying on his treatment, until the calling in of a Surgeon, is merely a last resort, and a palliation to the feelings of the friends, that "everything has been done that could be done"? No doubt this is an extreme way of putting the matter, but the uncertainty of the diagnosis, the rapidly fatal issue in many cases, and the large number of deaths from delayed operation, warrant me in so stating it.

A study of the following cases it is hoped will show the great advantage of seeking the Surgeon's aid at an early stage in the history of an abdominal case.

The 23 cases described in this Thesis have all occurred in my own practice during the last four years.

They have happened amongst working class people, residing within an area of a quarter of a mile long, by the eighth of a mile broad, in the district of Parsons Green.

The cases are classified under the following groups:

Group 1. Faecal Accumulation.
Cases 1 to 11. Inclusive.

Group 2. Intussusception.
A. Real, Case 12.
B. Simulated, Case 13.
Group 3. Strangulation by Bands.
   A. Incomplete, Case 14.
   B. Complete, Case 15.

Group 4. Obstruction by Growth.
   A. Intra-Mural, Case 16.
   B. Extra-Mural, Case 17.

Group 5. Appendicitis.
   A. Acute. Cases 18 and 19.
   C. Simulated. Cases 22 and 23.
Case 1. Faecal Impaction in Coecum - Recovery.

At 1 a.m. February 26th 1890 I was requested by Mr. S. Meadowbank to prescribe for his wife, who he said had taken suddenly ill with severe cramp in the bowels, He did not think it would be necessary for me to call till morning if she got something to relieve the pain. I prescribed 1 gr. opium pills to be given every four hours, hot fomentations to be applied to the abdomen. If no improvement set in, he was to call for me again. Accordingly at 4 a.m. he came, requesting me to come at once.

Mrs S. was 33 years of age, had three children all alive, always enjoyed good health, except for irregularity of bowels.

I found the patient lying on her back, knees drawn up, face not pale, but sick looking, facial contortions coming on, on account of the pain.

The tongue was clean in front, coated behind. She complained of thirst, caused by vomiting. Her temperature was 98° F. pulse 80, respiration 24 per minute.
Abdomen fairly well nourished, marked by striae gravidarum, movement on both sides good, no distention; peristaltic movements evident.

Abdomen soft resilient all over, except in the right ileo-lumbar region see Fig. 1. In this area a hard solid mass could be felt occupying the lower part of the ascending colon. It was painful to touch, could not be indented, but could be slightly moved from its position.

I could not detect hard faeces in any other part of the canal.

Resonance all over, except over the hard mass, Nothing to be felt per rectum except some small pieces of faeces.

Whilst the abdomen was being examined the patient vomited a considerable quantity of dark green coloured fluid, smelling badly, but I could not say it was faecal.

She had felt quite well d̄in going to bed. About 2 hours afterwards she was awakened by sharp griping pains in the right side of the abdomen. The painful spasms came at short intervals, each one being more severe than the previous one. Sickness and vomiting set in, the vomiting following
each spasmodic attack. The vomited matter consisted of food etc., then dark green bilious liquid.

Provisimal diagnosis - Faecal Obstruction - I injected hypodermically 3/4 gr. morphia over the painful area, and ordered the hot fomentations to be kept up. I also gave a large enema of soap and water through O'beirne's tube, which was passed high up into the bowel. This brought away a number of scybalous masses not very large. Neither food nor liquids by the mouth to be given until I returned 11.30 a.m. The patient was relieved slightly from pain, but vomiting still present with great thirst. The mass was still painful, and unaltered in position. There had been no motion, and no flatus. As I was in doubt as to the real condition of the bowel and unwilling to allow the patient to remain in a state of danger, she consented to go to the Hospital. She was placed in Ward 17 under the care of Mr. Millar. She was carefully examined by Mr. Millar and Mr. Cathcart, who thought the condition due to impacted faeces. She was detained for three days during which time several enemata of olive oil and soap and water were given. Gradually the mass disappeared, being softened down and came away in soft poulticeous motions. She returned to her home.
on the fourth day quite well.
Case 2. Faecal Accumulation. - Recovery.

Mrs. H. aged 66 married, residing in Royal Park Ter. sent for me on the afternoon of June 11th, 1890. She had been seized suddenly with severe pain in the abdomen. I found her lying on her back, with knees drawn up. She was ghastly pale, in a state of collapse, her face contorted with intense suffering. She is a big unwieldy woman, somewhat sallow and flabby. She has had nine children and one miscarriage. Her general health good on the whole. She had indefinite dyspeptic symptoms for a few weeks, and her abdomen seemed to be growing more full. For a few days she had been out of sorts and had had some diarrhoea but no proper motion. Her pulse 56, feeble, but regular, temperature 97.8°F. Tongue white at the yellow edges, and dirty coating over the rest. The abdomen was large, rounded and flabby, making palpation and percussion almost impossible. Pressure over the region of the Caecum in front, and in the lower part of the lumbar region behind, produced intense pain. When the spasms came on, a firm mass like a thick rope could be felt running across
the abdomen. A dull percussion note was obtained over the caecum ascending and transverse colon. See Fig. 2. Examination per rectum showed a normal temperature, no faeces, nothing abnormal to be detected.

For three days previous to the attack she had had no passage by the bowels, but still felt quite well. During the early part of the day she assisted her daughter with a very large washing. She was very tired, and lay down to rest on the top of the bed. She lay for an hour and, feeling refreshed, was in the act of rising, when she was seized with a sudden sharp pain, like a knife piercing her in the lower part of the right lumbar region behind, or as she said the pain held her "like a vice," and she writhed on the floor with it. The pain shot down as if to the right thigh in front. Almost immediately vomiting set in, and persisted at short intervals. The vomited matter consisted she said of "all the food she had taken that day". Later on it became liquid, dark, sour, but not faecal. She had not passed flatus for some hours.

I injected 1/100 gr. of atropia and $\frac{1}{2}$ gr. morphia subcutaneously over the seat of pain in front, and
gave a large distending enema of soap and water in the following manner. I was able to pass the O'beirne's tube up the rectum a distance of 10 inches without any difficulty, and shortly afterwards the enema came away coloured, but without faeces. I then injected through the same tube, about three pints of warm olive oil contained in a douche pan, suspended above the patient. She was placed in a semi-prone position with the buttocks elevated by pillows. Hot fomentations, were also to be applied.

6.30 p.m. No abatement of symptoms. Vomiting and retching at very short intervals, and the pain still severe and in paroxysms. The olive oil had been retained but no motion, no flatus as yet. She was not looking quite so ghastly and her pulse was was 90, temp. 98°F. The abdomen was more tympanitic except over the dull area. I ordered 1 gr. opium pill to be given every three hours, and no fluid to be given by the mouth until I saw the patient again. Although the extensive dullness elicited in percussing, the area of ascending and transverse colon pointed strongly to faecal accumulation, still the presence of sudden acute pain, persistent vomiting, and sudden onset of all
these symptoms made me dread the possibility of a more serious state of affairs. I asked Mr. C.W. Catncart to see the case with me that evening.

At 9.30 p.m. he saw the patient with me, and found the pulse 66. She had been relieved by three very small motions, following the enema given earlier in the day. She could not then turn round in bed without great pain, the vomiting was still present but not so frequent.

There was pain over the sacrum and erector spinae, also in the groin and down the thigh. After a very careful examination Mr. Cathcart thought the condition one of faecal accumulation, and the acute symptoms due to overdistended caecum. He advised the opium to be kept up, and to wait till the following day to see the effect of the oil enema.

10 a.m. June 12th 1890. I found the patient looking better, pulse 84, stronger than previous night, temp. 93° F. Tongue still coated, but not so thirsty. Some of the oil had come away, but no motion. I gave a distending enema of soap and water, and ordered tablespoonfuls of beef tea to be given at short intervals.

7.30 p.m. No motion yet, no flatus. Temp. nor-
mal, pulse 70. There had been no vomiting since morning.

10 a.m. 13th June. Since previous night there had been two very large motions, both dark in colour, poulticeous, very offensive, a number of very hard stony-nodules mixed with the rest. The abdomen not quite so full, and the pain greatly relieved. After the second motion the vomiting entirely ceased. Movements over the left side greatly improved, but over the lower part of right side still absent. There was a considerable amount of dullness over the caecum and ascending colon.

7.30 p.m. Patient still improving. Had other two motions as large as the first two, and much the same in colour and consistence. Abdomen much less, dullness greatly diminished, the temp. normal, and the pulse 70 feeble.

Ordered beef tea and milk during the night with 1/2 oz. of spirits every four hours if awake.

June 14th. Still improving, pulse stronger, and had an appetite for food. Another motion this morning after an enema given by her daughter. The faeces not so dark nor so offensive. There was entire absence of pain, the abdomen flatter and dullness gone. An enema was given for sever-
al mornings, a motion coming each time.

Complete recovery in the course of a fortnight.
Case 3. Impacted Faeces in Coecum - Recovery.

June 11th 1890. Mrs W. aged 42 widow, came from Dumfries that day to reside at Royal Park Terace. She had been busy during the afternoon arranging her furniture when an "excruciating" pain caught her in the lower part of the bowels in the right side. "It was so bad she took to bed immediately", Hot applications were applied and kept on until the evening without relief. At 9.30 p.m. as I was entering Royal Park Ter. with Mr. Cathcart to see Mrs H. of the previous case, I was accosted by Mrs W's son, who requested me to see his mother as soon as possible as she was in very great pain. Learning from him that the seat of pain was in the abdomen, and had come on suddenly, Mr Cathcart very kindly saw the patient with me.

We found her in bed in a half reclining position. She was little thin and wiry. She was pale and anxious looking, temperature normal, pulse 78 fairly well filled. She had had dyspeptic symptoms for two or three weeks. On the 7th her bowels had acted freely after a seidlitz powder but there had
Outline of nodular mass

Point of greatest pain
been no motion up to the 11th. Her husband died 10 years ago, after a three day's illness from acute intestinal obstruction.

On examining abdomen I found the walls thin, relaxed, no flatulent distention, intestinal peristalsis visible when pain came on, which it did in acute paroxysms. Movements of abdominal wall free on both sides. Palpation produced great pain in the right iliac region. There was a hard nodular sensation in the region of the coecum and a dull note on percussing over this; nothing could be detected elsewhere see Fig. 3.

We diagnosed impacted faeces in coecum. I gave morphia, applied hot fomentations and gave an enema of 2 pints of olive oil through O'Beirne's tube inserted high up the rectum. One $\frac{1}{8}$ gr. opium pill every four hours to be given internally.

June 12th 1890. 8.30 p.m. Shortly after our visit of the previous night, vomiting set in and continued during most of the night. The vomited matter consisted at first of food particles, then small mouthfuls of clear liquid. The vomiting was succeeded by painful retching. No motion yet. Pulse and temp. good. Complained of thirst, but pain not so acute, though still paroxysmal.
I gave a soap and water enema which removed a few scabrous masses, but increased the pain and produced vomiting. Opium and belladonna were given by the mouth, this also kept up the vomiting. I now used morphia. Suppositories then continued for two days hot fomentations, and light milk diet. No motion, but abdomen became markedly tympanitic.

June 13th 1890. A little vomiting in the morning but it did not return. Pain diminishing.

June 14th, 1890. Large enema of salad oil, flatus came away at intervals after this, but no motion. In the evening a large enema brought away a good stool with improvement of symptoms.

June 15th. 1890. Morning. An enema brought away a very large stool with complete relief of symptoms. This patient has never had a similar attack since, but suffers occasionally from constipation.

Mrs B., aged 46 married residing at Royal Park Ter., sent for me at 6.30 a.m. on Sunday the 6th Sept. 1890. She complained of acute pain in the bowels. I went immediately and found the patient lying on her back with knees raised. She was moaning loudly, her facial muscles contorted, as if suffering great pain. Her face was pale and covered with clammy sweat, pupils contracted, skin moderately warm, temp 97.6 F., pulse 72 small, weak regular, respiration 28.

Her previous health had been very satisfactory, except slight constipation. At 12 midnight she was awakened by a sharp pain in the left side. At first it was bearable, then became severe, and in paroxysms at short intervals.

She was in the house alone - her husband being on night duty - and not wishing to disturb her neighbours endured the pain for some time. It became so violent however, she was forced to go to a neighbour "doubled up all the way" for assistance. The neighbour got her to bed and applied
hot fomentations, and gave her a few drops of laudanum.

Vomiting then set in and continued till I saw her. The vomited matter consisted only of frothy mucus.

Ten days before had taken salts which acted apparently well. The day before the attack whilst sitting on the sands at Joppa, she felt a sharp pain in the left side which passed away, but returned at 12 midnight.

Abdominal wall flat, the recti muscles tense, movements otherwise good. Palpation elicited a hard nodular mass in the left lumbar, and iliac region which was painful when pressed upon. Percussion gave a dull note and tenderness over the ascending colon, the hepatic flexure, and especially sigmoid flexure see Fig. 4.

Per rectum the finger could detect nothing abnormal.

Provisional Diagnosis - Impacted faeces in sigmoid flexure.

I injected a $\frac{1}{4}$ of a gr of morphia hypodermically over the seat of pain. Ordered hot fomentations I tried to pass O'beirne's tube but could not.
9.30 a.m. The vomiting ceased shortly after giving the morphia, but the pain still came in paroxysms.
I gave a large enema of warm olive oil which nearly all came away shortly afterwards uncoloured.
At 12 noon Mr Cathcart saw the patient with me.
He thought the condition was probably faecal accumulation causing inflammation and probably excited by the salts.

He advised a continuation of present treatment.

Two pints of olive oil were allowed to pass very slowly into the rectum, the head being low, the buttocks raised high. 1 gr. opium pill was given every four hours.

Sept. 7th. 9.30. The olive enema given on the previous day had been retained but no motion yet.
There was less pain.


Sept. 9th. Pain easier. A few small faecal masses and a hard mass felt shifting towards the left side in the transverse colon. The mass in the left side much softer.

Sept. 14th. Up to-day. Had a second oil enema.
Faeces have passed pretty freely, but only the
thickness of a pipe stem. Her symptoms gradually improved.
Mr. R.N. aged 52 ironmoulder, residing in Stanley Pl. a well-built wiry-looking man with pale clay-coloured complexion. He had always enjoyed good health except that he was very costive, and had to study his diet carefully, so as to correct the tendency. He had always been temperate in his habits. When I called to see him at 8 a.m. Aug. 28th. 1891, found him lying in bed on his left side, doubled up, apparently in an acute paroxysm of pain. He was very pale, temp. 97°F., his pulse 84 and weak, tongue coated, very sick and retching much. In the morning he went to his work 6 a.m. A few minutes after starting work, he felt an inclination to defecate. He went to the W.C. but did not pass much. He felt nothing unusual. On resuming his work, however, he was seized with a sudden sharp pain "across the middle of the belly" and then "down deep into the left side." He felt again as if he could defecate, and for that purpose went to the W.C. On going there the pain became so bad it "doubled him up" and he became sick and vomited. He requested his fellow workers to take
him home which they did with difficulty on account of
the agony he was enduring. I was then sent for.
Examination of abdomen. - Movements of abdominal wall
free. Palpation in the left iliac region a hard
ovoid mass, about the size of a small orange, but
could not displace it. There was nothing else to
be felt over the rest of the abdomen.
Percussion - fairly resonant all over, except in line
of descending colon, where the note was dull over and
above the hard mass. See Fig. 5.
Per rectum - could detect nothing unusual.
He had not passed flatus since the attack. I in-
jected \( \frac{1}{2} \) gr. of morphia over seat of pain, gave
large enema of soap and water, and ordered hot fo-
mentation to be applied.
1 p.m. Patient very little better, large part of
enema came away but no faeces. Sickness and vomit-
ing still persisted. He could not lie still, was
continually getting out of and into bed. He had had
no food nor liquid, and did not wish any. I ordered
pill opii \( \frac{1}{4} \) gr. every four hours and some ice to
suck.
7 30 p.m. Still no motion, and the mass unmoved.
He was still very sick and vomited green bilious
fluid. He had passed no flatus, transverse colon
more resonant.

I gave another large enema, hypodermic of morphia and hot fomentations. Ordered small quantity of milk and beef tea to be given during the night.

Aug. 29th 1891. 9 a.m. Patient had very bad night, slept none, had to pace the floor. The desire to vomit greater but could not. He had also a strong desire to defecate, but could not do so. His wife eager to give him relief administered a large dose of castor oil which only intensified his sufferings. He had no motion and passed no flatus, the mass still present, the colon above more distended. I ordered small spoonfuls of milk and water to be given at intervals.

7 p.m. Pain slightly diminished, no motion, no flatus, passed urine, vomiting not so frequent.

Aug. 30th 1891. 10 a.m. Passed an easier night but vomited a quantity of dark green liquid, not faeculent, no motion, no flatus. He felt very tired and frightened to take fluid for fear of setting up vomiting.

Mr. Cathcart saw the patient with me and thought the condition due to faecal obstruction and advised the
treatment to be continued.

7 p.m. Sickness and vomiting still present but at longer intervals. No motion and no flatus.

I gave another enema and before leaving the patient there came away several small hard pieces of faeces.

Aug. 31st. Patient very much better this morning. He had two motions during the night, each contained some very hard masses, some of them coated with slimy mucus. Since having these motions, he had passed flatus and had no sickness nor vomiting.
Case 6. Faecal Accumulation -- Followed by Herpes Zoster. -- Recovery.

On the 13th of April 1892 I was roused up at 2 a.m. to go and see Mrs. C. residing at Prospect St. She was said to be suffering from "stoppage of the bowels". When I called she was standing in a stooping position over the side of the bed, evidently in great agony. She was 32 years of age, married and had one child. Previous health very good, but very costive. Her bowels had not been opened for several days, she could not say when. She felt quite well on going to bed at 1 a.m. She was awakened by feeling an inclination to defecate. She said a little came away with no sense of pain.

Half an hour afterwards she was seized with violent cramp in the bowels, had a desire to defecate but could not. Hot applications were applied but gave no relief. When I saw her there was no increase of temp. or rapidity of pulse.

On examining the abdomen, I found it very much enlarged, but movements free. Palpation detected solid mass along the whole line of transverse colon, and ascending colon, but not so definite in the descending. See Fig. 6
I could not elicit the doughy sensation so frequently mentioned.

On percussing I got dullness in the whole of the large intestine. Being told before I went of what the woman was complaining, I furnished myself with an enema syringe. I injected $\frac{1}{2}$ gr. morphia hypodermically, and gave a large distending enema of soap and water. This came away almost immediately with no faeces. I repeated the enema and called some hours after to find she had had a large motion. I gave her another enema, and ordered very small quantities of liquid food to be given. I again injected morphia to relieve the twisting pain which was still present.

April 14th. The patient had two large motions since yesterday, thick, dark and offensive. On examining the abdomen there was a considerable diminution in its bulk. Still dullness along the transverse and ascending colon. I gave another large enema, but no morphia as the pain had abated.

April 15th. The patient very much better. The bowels had moved freely, and the whole of the dullness gone.

She complained of pain over the right iliac and
lumbar region, also over 3rd and 4th rib on left side. She said it was a burning sort of pain. I could not account for this, and thought it might be transient, and gave no treatment for it.

April 16th. She has had no other motion. The burning sensation still present. An area of four to five inches in diameter over the right iliac lumbar region was covered with Herpes Zoster, and the same eruption was found over an area of three inches over the 3rd and 4th ribs on left side. A soothing ointment was applied and tonics given internally.
June 5th 1892. I was requested to see Mr. T.R. residing at Wilfred Terrace said to be suffering from "severe pains in the belly." I found the patient in bed lying on his left side, with his knees drawn up, his face and forehead being bathed in copious perspiration.

He had always enjoyed excellent health and did not suffer from constipation. He was quite well when he rose that Sunday morning. He had an inclination to go to the stool. He did so but only passed a small nodule of faeces. About half an hour after, he was seized by a "disagreeable colicky pain" in the left iliac fossa. At first it was bearable and he was able to have his morning bath and breakfast. The pain however, was still "gnawing and getting worse". He dressed himself with the intention of going to church, but the pain became so bad he had to take to bed. His mother applied poultices repeatedly but with no relief.

When I saw him his temp. was 99 F.; pulse 78 and tongue coated. On examining the abdomen I found resonance all over except in the line of descending colon.
Fig. 7.

Hard tender mass
which gave a dull percussion note at the lower part of the descending colon or region of sigmoid flexure. See Fig. 7

On palpating the part a hard resistant oblong shaped mass could be felt, very tender to the touch. Nothing abnormal could be detected in rectal examination.

I gave an injection hypodermically of morphia \(\frac{1}{2}\) gr. into the painful part, also a large enema of soap and water.

When I called in the afternoon the pain had greatly passed off, the bowels had moved, a large piece of hardened faeces came away with the rest of a soft motion. On palpating the abdomen there was no hard mass to be felt, only a little tenderness present.

The patient was able to go to business on the following day.
Case 8. Faecal Accumulation - Recovery

Miss B.D. aged 16, domestic servant residing at Parson's Green Ter. complained of pain in belly, sickness and vomiting. She had been in good health, and taken her food well. She was very costive, the bowels many times not moved for a week. During the six months she had been in her situation she had got a liberal supply of animal food - more than she had ever been accustomed to. She had also eaten a very large supply of melons.

She said she was quite well when she went to bed on the 18th Sept 1893 but early on Sunday morning the 19th wakened by "sharp gnawing pain in her bowels." The pain became worse and vomiting set in. She was too ill to work so was sent home. When I called I found her lying in bed on her back, knees drawn up, and her face very flushed. Her tongue was coated with yellow fur.

Her Temp was 98.5°F, pulse 108, fairly strong, her pupils dilated.

On examining abdomen found it full, Rounded movements good. Palpation; Two elongated hard masses could be felt, one in the coecum
and ascending colon, the other occupying the whole of the descending colon see Fig. 8.

That on the right side gave a harder feeling than the other, and it was the most painful. Percussion gave dulness in nearly the whole length of the colon. Nothing but pieces of faeces to be found per rectum.

I gave hypodermic of morphia $\frac{1}{2}$ gr. atropia sulp 1/100 gr and applied hot fomentations.

I allowed olive oil to to be slowly passed up the rectum through O'biernes's tube, the buttocks being elevated. A mixture containing Hydrocyanic acid and bismuth was given for the sickness.

Sept 20th The sickness stopped, no motion, still pain in right side but none in left. I gave a large distending enema of soap and water.

When I called in the afternoon she had had copious stool, some of it very hard. I gave another enema of soap and water, which brought away some hard scybalous masses.

The following morning I repeated the enema, and in the evening was informed that she had had "three large bad smelling motions."
I examined the abdomen, it was perfectly flat, and neither a dull note or hardness to be felt.

She returned to her situation a few days after quite well.

December 9th 1893. Received a message to go immediately to see Mrs De V. aged 50 cook to Captain M. M.R.C.V.S. at Abercorn Gardens. Message came at 3 p.m. but it was 8.30 p.m. before I was able to see her.

I received the following statement from Captain M. "Mrs De V. was well apparently in the morning at 10 a.m., but soon after that, she felt a smart pain in the abdomen and by 12 noon she was in bed with it and suffered continuously. Just after we had finished dinner 8 p.m. the housemaid came and said she would like us to go to Mrs De V. as she was afraid to stay with her. We went down at once, and the sight was ghastly, we thought we were looking at a corpse. She had been vomiting repeatedly. The poor woman was suffering intensely from pain in the abdomen. I felt her pulse but it was almost imperceptible, her hands were cold and death-like, presently she laid her head on the pillow and ceased to breathe. I said to my wife "it is all over", nothing could be more death-like. However in al-
most a minute she began to breathe a little again, and soon opened her eyes and moaned and seemed in terrible pain. Then in about 10 minutes the pain seemed to increase, cramps seized her feet and hands, her face remained like that of a dead person. She rose up in bed and screamed oh Captain M. frequently, and clutched at me for support, and also shouted to bring hot water for her feet. She got the hot water and her feet into it which caused a relaxation of the cramp. You then came in yourself and you know the rest.

When I saw her she was in bed, on her back with both limbs drawn up. She was looking pale. Her temp 97. F. pulse 60 very weak. Her extremities were cold and clammy. She was evidently suffering great pain which she referred to the right caecal region. I injected $\frac{1}{2}$ gr. morphia hypodermically at once so as to enable me to examine the abdomen carefully. In the meantime I enquired carefully as to her previous health and habits. She had been in the service of Captain M. for several years. During that time her health was good, and very temperate in her habits. She never suffered from constipation. She was very fond of wheat meal bread and oatmeal porridge. The whole abdomen
was very full and distended, making palpation difficult. I could not detect any restraining of abdominal movements. Could feel a solid mass in the region of the cæcum see Fig. 9. It was painful on pressure. I could not detect anything in the other parts of the abdomen. Her rectum there was nothing not even faeces. She vomited twice during the time I was examining her. The vomited matter resembled a mixture of meal and water. It was sour smelling not faecal, and so large a quantity that I examined the stomach for dilatation.

I could make out none. There had been no flatus. I gave a large enema of soap and water and saw the patient three hours later.

Very little of the water had come away and there had been no motion. Vomiting still persisted not cramp had come on again, and her extremities were warmer. The pain in the right side still acute - no flatus. I injected \( \frac{1}{2} \) gr morphia, ordered \( \frac{1}{2} \) gr opium pills to be given every four hours, and tablespoonfuls of lime water and milk at intervals to allay thirst and vomiting. I gave another enema of soap and water.

December 10th 9 a.m. Patient had a bad night with
pain and vomiting. The vomited matter was kept for me to see. It filled more than half an ordinary wash hand basin. It resembled barn stained green with bile. The last 2 times she vomited she said it resembled in taste soapy water.

The abdomen not nearly so distended and admitted of easy examination. The mass which I felt when first I examined the patient had changed its position. It was situated in the upper part of lumbar and lower part of hypochondrium. It was oblong in shape, would not pit in pressure. This part was still painful in pressure.

7.30 p.m. Patient had vomited several times, consistency as before, she said it was distinctly soapy in taste, the quantity much as before. The bowels moved slightly. No flatus. The abdomen still distended.

Dec. 11th. 9 a.m. Vomiting still present in fact she was vomiting when I entered the room. She had had an easier night so far as the pain was concerned. I saw Mr Millar surgeon about her. He kindly consented to give her a bed in his female ward. She was removed to the Hospital that forenoon and placed under Mr Millar's care. She was examined
by Mr. Millar, Dr. Wyllie, and Mr. Cathcart. They were unable to say what the obstruction could be, but thought it advisable to keep up the enemata, diminish the fluid by the mouth, and watch the case. Strange to say from the time she entered the Hospital all vomiting ceased. During the few days she was there she had several motions which consisted largely of the husk of wheat meal. There was also a small round concretion the size of a pea in one of the motions.

The mass which existed in the ascending colon disappeared. She returned home on the fourth day after her admission to the Hospital.
Case 10. **Impacted Faeces in Transverse Colon.**

**Recovery.**

On Jan. 17th 1894. I was asked to see Mr. D.C. residing at Royal Park Ter.

He is 33 years of age, married, tall thin wiry looking pale features, and an accountant. He complained of pain in the bowels. When I saw him he was lying on his back with knees drawn up, and frightened to move on account of pain in the abdomen. His tongue was coated with thick yellow fur, was very thirsty, temp 100° F. pulse 86 fairly well filled.

Abdomen flat easily palpated, movements restricted over area of epigastrium and unbilical regions marked thus Fig. 10.

Palpation. There was a well marked feeling of resistance beneath the recti extending for a considerable area 3-4 inches around the navel. This part was very tender to the touch. There was also a feeling of resistance in left ilio-lumbar region but not so marked nor so tender as that around umbilicus. Percussion gave a fairly resonant
note over whole abdomen except at part stated.
Urine scanty, high coloured, and abundant urates.

This patient is one of eight of a family,
His father, mother and rest of family all alive and well. He never had any illness until ten years ago when he had "a severe attack of Dyspepsia which incapacitated him from work for about 6 months." Since then he had enjoyed fairly good health, with the exception of slight attacks of indigestion which came on with pain in the pit of stomach and which he managed to relieve by poultice and rest. He never was troubled with costiveness at these times.

On the evening of the 14th Jan. 1894 he felt an inclination to go to stool, but the bowels would not move. On the 15th towards mid-day he felt a pain coming on in the pit of the stomach which increased in severity until he arrived home at 6 p.m.

He applied poultices during the night. Next day the pain gradually shifted down to the navel. It became so severe that he could scarcely move in bed. This continued till the 17th when after trying a little medicine by the mouth he began to vomit. This continued till the evening when I was called to see him.
Finding the condition above described I injected $\frac{1}{2}$ gr. morphia over the seat of pain, gave an enema of olive oil and ordered all fluid by the mouth to be stopped till I saw him again.

18th Jan. Temp 99°F. He had a very restless night. Vomiting continued until 4 a.m. He felt tired and worn out. A part of the olive oil enema came away with little pieces of faeces.

He was not aware of having passed flatus for several days.

The abdomen was not quite so rigid nor so painful.

I continued morphia and gave another oil enema.

19th. Patient very much better he "felt as if in another world". Had had several motions during the night, some parts hard dark and smelling badly. The area of dulness had entirely disappeared and there was no pain nor tenderness over any part of the abdomen.

In a few days he was able to resume his duties.
Case 11. Impacted Faeces in Splenic Flexure. -

- Colitis - Recovery.

Mrs B. Jr. aged 20 married residing at Comely Green sent for me on Friday March 9th 1894 complaining of pain at the lower edge of left rib and shooting up the side.

When I called her temp was 99° F. pulse 74 regular and well filled. Tongue coated brownish yellow, conjunctiva slightly jaundiced, pupils dilated, no appetite, the bowels moved the previous day, She was menstruating and had always done so regularly before and after her marriage, which took place eight months ago. There had been no difference in the quantity or length of time, and no pain. She had frequently suffered from bilious attacks. Her previous health and that of her brothers and sisters good.

I examined the chest carefully but could detect nothing to account for the pain, there was no cough.

On examining the abdomen I found there was tenderness and dulness over the upper part of des-
ascending colon see Fig. 11. Diagnosis uncertain I gave Calomel grs. VI followed by saline Hydrocyanic acid for sickness, small quantities of milk and potash and chicken tea.

March 10th 1894. Temp 99°.1 F. pulse 80 conjunctiva brighter, tongue moist, clearer, bowels moved freely, very dark some hard pieces coated with mucus.

Vomiting several times, some hours after motion. On examining abdomen again I found movement over descending colon diminish, and distinct dullness over this part.

Palpation. Great tenderness over the area outlined in Fig 11c. Pressure in part "b" midway between lower edge of last rib and crest of ilium gave great pain. There was also pain on pressure on the whole length of colon behind, also over region of kidney and spleen. There was distinct resistant feeling at the upper part of descending colon, and dullness also over this area. Pressure in the region of ovaries or uterus gave no pain.

Diagnosis possibly colitis. I gave 3 gr Morphia hypodermically at point "b" and applied hot fomentations. Milk and potash in small quantities at short intervals.
March 11th 1894. Sent for early this morning on account of increase of pain over descending colon. She had been very restless all night, slept none, and pain very bad. Had pain also over the 2nd and 3rd ribs on same side. I examined the chest, could detect nothing, no cough, and breathing not rapid.

Temp 101°. 3 F. pulse 108 regular and fairly strong. The abdomen was a little more distended and tympanitic. Percussion over the upper part of descending colon and splenic flexure, did not give the usual resonant note. The skin over this whole area very hyperaesthetic. The distended and tympanitic tendency of the abdomen this morning made me think there was something in the splenic flexure keeping up the colitis or Peritonitis which was present. I gave 3 gr. morphia hypodermically ordered ½ gr. pill opii every four hours, and the hot fomentations to be continued. Not sure yet as to the cause. The bowels moved freely after the calomel and saline - but after the motion vomiting set in, and other symptoms had become worse.

7.30 p.m. Temp 102°. F. pulse 96 fairly good. Pain not so severe, had not passed flatus, same
treatment continued.

March 12th. Mr Cathcart saw case with me this morning. Temp. 100° F. pulse 96. Had been restless all night. Pain still bad - even with opium. No motion of bowels, but has passed water, high coloured with urates. Mr Cathcart examined patient most carefully. He could not be certain as to whether the condition was one of Perinephritic abscess, spinal disease, or faecal impaction of splenic flexure setting up a peritonitis around. Treatment as before with large enema of warm olive oil. Two and a half pints were slowly injected.

7 p.m. Temp 100°.3 F. pulse 108 strong and regular. Felt much better. She retained the olive oil for sometime after it was injected, and experienced "instant relief shortly after the oil had been injected."

March 13th. Temp 99°.2 F. pulse 90 good. Had a quieter night, tongue clean, and had a soft motion during the night. The local condition much the same. Ordered the same amount of olive oil.

7 p.m. Temp 100°F. pulse 86 good. Had two motions soft. In the first there came away a large formed piece softened around, but with a hard centre.
The piece was about 3 in. long and 1½ in. thick. Pain not so bad and felt easier.

March 14th. Temp 98.8 F. pulse 88 good. Had a good night's rest. Felt pain on moving off her back, but pain in the chest gone. Abdomen still tender to touch, 7 p.m. Temp 99°F. pulse 90 abdomen not so distended, and less tympanitic.

March 15th. Temp 98.6 F. pulse 88 good.

Menstruatum has been absent for three days now, so obtained some urine to examine. With the exception of urates there was nothing abnormal - no albumen. The pain and inflamed condition gradually subsided and the patient is now in excellent health.
Remarks on Cases 1 to 11.

The preceding cases are illustrations of a very common condition in practice, and the fact of their being common, often tends to make us neglect many interesting points, which have a bearing on the diagnosis and treatment of other more serious abdominal cases. So closely do the symptoms of the different kinds of intestinal obstruction resemble each other that it is difficult and in some cases impossible to tell from the symptoms alone with which kind we are dealing. The only symptoms in these cases which could help me in forming a diagnosis—and even these are liable to be wrong—were the previous history of constipation, and the presence of a mass in the large intestine.

A faecal mass lying in some part of the large intestine has been mistaken by eminent authorities for a tumor of some of the abdominal organs, (see Bright. New Sydenham Society 1860.)

Thomas Bryant operated for a strangulated hernia, but found none. The patient died, and at the P. M. examination the symptoms were found to be due to a blockage of the caecum, ascending and transverse colon, by faeces (Times and Medical Gazette Vol 1.
Let us take the individual symptoms and try to analyse them.

Pain. Pain is the most constant of the symptoms present. It is the result of an over-distension of the gut where the accumulation is great; where the mass is small and impacted, it is the result of a powerful contraction of the wall of the intestine upon the mass intensified by peristaltic action.

The condition of the health, of the nervous system, of the temperament of the patient, and situation of the part affected at the time of the attack, have a considerable influence in modifying the effects of the pain on the system.

The character of the pain is described differently by the patients. One describes it as "excruciating" another says "griping" others again say "sharp gnawing" or "like a vice". In these cases where the mass occupied the caecal region the pain was greater in degree and more continuous, than when it occupied any other part of the large intestine.

In works dealing with faecal accumulation, the pain is spoken of as coming on gradually. In nearly all the preceding cases it came on suddenly without the slightest warning. Such cases as 5, 7, and 10 the pain was preceded by a desire to defecate, after
which it came on rapidly.

In most cases of obstruction of the small intestine, the localisation of pain seldom corresponds to the seat of the disease. In the large intestine however it is otherwise. With the exception of case 11 the patients referred the pain directly to the part affected.

In case 11 the most painful point was at the lower part of the chest on the left side, and was so severe that movement of the chest wall produced great agony.

M Treves in his treatise on Intestinal Obstruction p. 361 says that "in the case of the stomach and of the colon it is possible to conceive that painful sensations occurring in those parts may be more or less definitely localised, since they are more constant in position and in the relation that their parts bear to one another.

Collapse.

This condition was present in only three cases viz; 2, 4. and 9. According to Treves "Collapse" depends upon - a profound impression upon the nervous system - an impression that acts mainly through the sympathetic centres and displays itself through certain grave and violent vascular disturbances.

The altered circulating conditions are made
evident by the lowering of the temperature of the surface, by the cold sweats, by the frequent lividity of the extremities, by the anaemia of the brain, by the small and rapid pulse. Intestinal Obstruction p. 356.

Vomiting - Vomiting is not so common a symptom in obstruction of the large intestine as it is in that of the small bowel. In cases 6. and 7. there was none, whilst in cases 1. 2. 4. 5. 8. and 9. it set in immediately after the onset of pain. The vomiting in all these cases was purely reflex, and brought about in the same manner as that following a squeeze of the testicle, or pressure over the ovaries.

Case 15. to be studied later on is a good example of vomiting set up reflexly. In this case immediately after I had injected a small quantity of fluid by the bowel, vomiting and violent peristalsis of the bowel followed. Each paroxysm of pain was followed by an attack of vomiting in the most of the cases in which vomiting was present.

The vomited matter never became stercoraceous in any of them, nor was the amount vomited ever very much, except in the case of Mrs De V. In her case it was very great. I purposely restricted the amount of fluid by the mouth, still the vomiting
persisted. After I had given one or two enemas she complained of the vomited fluid as being "soapy to taste". This statement she repeated voluntarily. It is a very interesting point if such were the case. Certainly there never was any faecal odour in the fluid vomited. How far the amount of fluid secreted by the small intestine accounted for the quantity vomited, it is difficult to say.

Pulse and Temperature. These in nearly all the cases were normal or subnormal. In only one case was the temperature above the normal, inflammatory condition having supervened.

The pulse and temperature is of very little value in those intestinal cases so far as forming an estimate of their gravity is concerned.
Group II. Intussusception Real and Simulated.

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Case 12. Intussusception in infant - Operation on 2nd day - Collapse - Death.

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Case 12. February 17th 1890. 12.30 p.m. Was asked to see Mrs O's infant at Webster's Land Piershill.

She was seven and a half months old, had never been ill, was plump, rosy, and cheerful. She never had been constipated, the bowels having moved three hours before the attack. She had no teeth.

During the breakfast hour the child's father had been amusing himself and her by tossing her up and down in his arms. On leaving for work he placed the child on the bed, in a sitting posture, supported by pillows. Within half an hour Mrs O. was startled by the child screaming and looking sickly pale.

Thinking the baby had got something to eat from some of the other children which perhaps had disagreed with her, she gave a dose of castor oil with the idea of getting rid of it. This only aggravated the pain.

Shortly afterwards the child vomited, and passed by the bowels a small amount of blood and
Position of
Sausage-shaped
inus.
mucus.

I found at 1 o'clock the child lying in the cradle on the left side, motionless, very pale, and collapsed. Temp 97° F. but pulse so weak could not be counted.

On abdomen being examined there was little or no local tenderness, nor hardness of the abdominal wall. I found a sausage shaped mass in the umbilical and lumbar regions. See Fig. 12. Per rectum, I found a nodular protrusion in upper part of the rectum within reach of the finger. The finger on being withdrawn was covered with blood and mucus.

Provisimal Diagnosis. Intussusception of ilio coecal part. "I informed the mother of the serious nature of the child's complaint, and saw her several times that day. She remained in a collapsed motionless condition all day.

I prescribed a sedative for the vomiting, ordered the child to be kept warm, and little or no food to be given meantime.

Feb. 18th. Child's condition worse. I asked Mr. C.W. Cathcart to see the child with me. He did so, and found the conditions present pointed to Intussusception.

With the consent of the parents he operated.
At 4.30 p.m. On opening the abdomen Mr Cathcart found the small intestine quite collapsed at first. There was no great intestine on the right side as the invagination began opposite the Epigastrium. Some of the invaginated small intestine was withdrawn by gentle traction from the upper end, but only a limited amount could be got that way. The great intestine was then drawn through the wound on to the surface of the abdomen and the intussusception was undone by steady compression from below upwards, - the hand grasping the outside of the bowel. While the last part of the invagination was being overcome, the peritoneal coat gave way, but as the injury was apparently not more serious, and as the bowel seemed viable, the abdominal wound was closed without further procedure.

Mr Cathcart did not try insufflation in this case as it was a severe one, and because the condition had been present for about 30 hours when he saw it.

The difficulty met with in reducing the invagination by manipulation made it evident that insufflation would have been useless.

The child did not rally, and died at 9 p.m.
(This was the first case of the kind I had met with in practice, and hence was not specially alive to the importance of immediate insufflation or injection of water. In future cases I would give it an early trial.)

At 7.30 a.m. in the morning of the 26th March 1894 I was asked to see the daughter of Mr. S. residing at Brunton Ter. I saw her at 8 a.m. She was 3½ years of age and had always enjoyed good health, until the previous afternoon when this attack came on. She had never suffered from constipation or diarrhoea.

I received the following account of her illness from her mother. After the child’s ordinary mid-day meal which consisted of steak, potatoes, and stewed rhubarb in small quantities, she asked to be put to bed as she felt sleepy - a most unusual thing for her to do. She slept for 2 hours, and awoke complaining of pain in her head and then vomited. The vomited matter consisted of food and dark green bilious fluid. She did not vomit again. Shortly after the onset of vomiting a discharge of blood and slimy matter passed by the bowel. The bowels had moved very frequently during the night with great straining. The motions had been kept so that I had an opportunity of examining the discharge.
The mother also said that her husband was a traveller and on arriving home from London that morning, was greatly alarmed at the death like appearance of his child, and sent for me at once.

When I called I found the child lying on her back in a state of collapse. Her face was very pale, her eyes staring and glazed looking, her lips bloodless, her tongue clean, she had no pain and could answer me when I spoke to her.

Her temp was 97° F. and pulse 140 very weak.

I found on examining the abdomen that it was rounded and very full, especially below the navel. There was no pain, no resistance, and nothing could be detected out of place. The upper part of the rectum was distended and balloon shaped but contained no faeces—very cool. As the child desired to defecate after I had made the rectal examination I had an opportunity of seeing what came from her. She passed about 4 oz. of dark green slimy fluid with shreds of bloody mucus membrane, and 9 small bodies about \( \frac{1}{2} \) in. in size resembling Brussels sprouts in miniature. I uncoiled the small bodies and found they consisted of pieces of mucus membrane. She had passed a large number of these bodies before I saw her. They continued to come for the next
two or three days.

Provisinal Diagnosis, lay between an enteritis, and intussusception.

I ordered 2 min. of. Tr. Opii to be given by mouth every three hours; boiled milk and lime water in small quantities, to be given at intervals and warm fomentations applied to the abdomen.

I injected 4 oz. of olive oil per rectum.

During the next 4 or 5 days whilst I was in attendance the discharge gradually diminished, the temperature never rose above the normal, and the pulse gradually fell to 80 per minute.

There was complete recovery in 10 days.
Remarks on Cases 12 and 13.

There was no difficulty in the diagnosis of case 12. The classical description of the disease was illustrated there in all its simplicity. It would be out of place here to dilate upon the nature and symptoms of a disease like this on the strength of one case. I have however placed along side of this case, one of enteritis in order to emphasise some points bearing upon the diagnosis.

In both cases the onset was severe, vomiting set in early, and the discharge from the discharge from the bowel at the first was blood and mucus. In both cases there was rapid pulse with collapse, low temperature and tenesmus. To have seen the little girl when the blood and mucus came first one would have naturally come to a diagnosis of intussusception.

The points of distinction between those two cases are as follows:-

I. Pain never recurred in the case of the little girl, (13) whereas in intussusception (12) it went on increasing for some time, until complete
obstruction took place.

II. Vomiting, this only took place once in the case of the girl, in intussusception it recurred again and again.

III. A tumor was felt in the abdomen of the child whereas nothing was to be felt in that of the girl.

IV. Per rectum. A distinct projection of the invaginated bowel could be felt in the child, the rectum of the girl was empty and balloon shaped.
Group III. Strangulation by Bands.


Case 14. Feb 23rd. 1892. 5 a.m. Got an urgent call to see Mr J., gardener residing at Restalrig who complained of great pain and vomiting. He was 72 years of age, always in good health until the previous day. In the afternoon on alighting from a spring van in which he had gone to Leith he gave himself a sudden jerk, and immediately after felt a sharp pain in the right iliac region. He transacted his business in Leith and then returned home, all the time suffering great pain. Immediately after tea the pain became worse, and vomiting set in. The vomited matter consisted at first of indigested food, then a yellowish green fluid. His wife applied hot fomentations, and turpentine all night but with no relief.

At 5 a.m. I found him lying on his left side in great pain. He vomited just before I entered.
Fig. 14.

- Line of incision
- Position of painful point and where the knuckle was felt.
The vomited matter in the basin was dark olive green, sour smelling but not feculent. Vomiting had continued all night at short intervals. His temp was 98° F. pulse 72 regular not very full. Tongue foul, the vomiting came on again very distressing and exhausting. There was no pallor or collapse. He had one motion the previous day, but had passed no flatus since the onset of pain.

I found on examining the abdomen that it was well nourished, full, slightly reddened from the turpentine. Movements restricted by tense recti. Palpation painful at a point about 1 ½ inches above the middle of Poupart's ligament see "a" Fig 14. and from this point the pain radiated towards the umbilicus. A small nodule or thickening was felt by the palpating finger, a short distance (1 ½ inches) above internal opening of the right inguinal canal. (He had worn a truss for oblique inguinal hernia for 9 years, but had left off wearing it lately)

This small knuckle or nodule was extremely painful. Nothing to be felt elsewhere.

Percussion; The abdomen fairly resonant all over, except in region of the knuckle where very slight dulness could be detected.
Per rectum,—nothing abnormal.

I gave a hypodermic injection of $\frac{1}{2}$ gr. morphia applied not fomentations, and gave a distending enema of soap and water.

not

12.30 p.m. Pain much better, vomiting and retching still. The vomited matter clear fluid. Nothing came away with the enema. Had not passed water. Pulse and temperature normal.

7.30 p.m. Vomiting still present but not so often. Quite unable to take any food, the smallest quantity of liquid being rejected by the stomach. Pain not so bad, but intensified when retching. Temp 98° F. Pulse 70 irregular and weak. Tongue brown in centre. The abdomen tympanitic especially over small intestine. He had passed water, but no flatus.

Gave $\frac{1}{2}$ gr. pill opii every four hours.

Feb. 24th 9 a.m. Temp 98° F. pulse 72 irregular not so strong. Tongue brownish yellow fur; thirsty no motion, and no flatus. Patient still lay on his side, but the pain not quite so severe.

4.30 p.m. Temp 98°.2 F. pulse 70 irregular, no improvement. Gave distending enemas of olive oil through O’Beirne’s tube. Warm fomentations and opium pills continued.
7.30 p.m. Pain not so acute, but vomiting worse not faecal, but still no motion.

Feb 25th. 8.30 a.m. Patient's condition worse
Temp 97°F. pulse 70 weaker and irregular. Still no motion.

The abdomen distended, soft doughy mass in left iliac fossa, possibly faeces. Tried another enema of olive oil.

1 p.m. No motion, and condition getting worse.
Mr Cathcart saw the patient with me, and examined him carefully. The nodule or thickening which I had previously felt in the right iliac region could not now be detected by either of us. Mr Cathcart’s diagnosis was obstruction of bowel by band.

At 4.30 p.m. Mr Cathcart opened the abdomen in the right semi-lunar line, and found a part of the small intestine caught in some fold or pouch of the peritoneum near the internal abdominal ring. He withdrew it, and on examination found that only part of the circumference of the bowel had been involved, thus forming a "Litre's hernia." The part of the bowel affected in colour, but not gangreuous.

A considerable part of intestine or either side of the stricture was very much inflamed. Mr Cathcart
thought there was a good chance for the bowel to recover itself, so put it back without resection.

(Just before the operation a large mass of faeces came away from the lower part of large intestines.) The pouch could not be felt by the finger in the abdominal cavity after the intestine was liberated, but its position corresponded exactly to the position of abdominal wall, where I felt the nodule or thickening above mentioned.

9.30 p.m. Temp 97.1 F. pulse 80 strong. I ordered sips of milk and potash, with a little beef tea at short intervals.

Feb 26th 8.30. a.m. Temp. 100°. 5 F. pulse 80 strong. Patient had passed flatus, had no vomiting but troublesome cough due to collection of mucus in the throat.

Wound dressed.

4.30 p.m. Passed flatus frequently, passed urine, no vomiting, and taking food well.

10 p.m. Temp 100°. 2 F. pulse 60 good Tongue brownish in centre, passed urine, no pain. Mucus troublesome in the throat. Gave morphia suppository ¼ gr.

Feb 27th 1892. 8.30 a.m. Temp 99.2 F. pulse 58 good. Passed flatus but no vomiting. Slight
bronchitis present, the patient restless.

I ordered a tablespoonful of a mixture containing Digitalis, Ammonium carbonate and spirits of chloroform to be taken 3 times a day.

Wound dressed and doing well.

4.30 p.m. Temp 99°.3 F. pulse 84 breathing better.
10.20 p.m. Temp 99° F. pulse 80 good and feeling better.

February 28th. 8.30 a.m. Temp 99° F. pulse 80.
Patient feels wearied, ordered egg flip to be given occasionally, also beef tea with rice in it. Flatus passed and no vomiting. Wound dressed and doing well.

7.30 p.m. Temp 100.6 F. pulse 82. Patient restless.
Tongue brown in centre and dry. No motion.

Feb 29th. 8.30 a.m. Temp 98.4 pulse 78 strong.
Patient feeling better, had no motion, passed flatus.
Wound dressed.

March 1st. Temp 98° F. pulse 76 good. No motion.

Ordered a seidlitz powder.

7.30 p.m. Temp 98° F. pulse 72. No motion. Wound dressed. Deep stitches taken out owing to irritation. Ordered half an ounce castor oil.

7.30 p.m. No motion, gave enema of soap and water.
partially returned with no faeces.

March 2nd 8.30 a.m. Temp 93° F. pulse 80. no motion, tongue dry brown in centre, breath foul. Patient irritable. Gave another enema. Wound dressed and doing well.

7.30 p.m. Temp 98.4 F. pulse 84 strong. Patient felt as if going to have a motion.

March 3rd. 8.30 a.m. Temp 98° F. pulse 80, tongue slightly cleaner, more moist. Had two motions the first was solid mass very thick, about four inches long, the second soft brown and offensive but no pain.

7.30 p.m. Temp 98° F. pulse 76 and soft motion.

March 4th 8.30 a.m. Temp 97°.8 F. pulse 74 stronger regular. Patient slept well, tongue cleaning, passed flatus but no motion.

March 5th. 8.30 a.m. Temp 97° F. pulse 72. Patient slept well, feels well. Wound dressed. Diet increased.

March 6th. 10.30 a.m. Temp 98° F. pulse 72 strong and regular. No motion.

March 7th.10 a.m. Temp 97°.6 F. pulse 72. No motion. Castor oil ordered.

April 4th. Wound entirely healed. Patient out
for the first time.

April 18th 1894. Patient in excellent health and following his occupation as gardener,
Case 15. Strangulation by Band - Operation - Death.

December 24th 1892. Called to see Mr W. P. aged 45 compositor residing at Parson's Green. He complained of agonising pains in the abdomen in the region of the umbilicus.

With the exception of slight costiveness, he "never consulted a doctor in his life." On the 23rd he did not feel well, but was able to go to work. Early on Saturday morning he was awakened by an uneasy feeling in the bowels, but did not vomit. Thinking it was due to flatulence he took a dose of liquorice powder, and applied turpentine stupes, but got no relief.

He got up to go to work, but returned after going a short distance. He again applied hot fomentations, and at 10.30 a.m. sent for me. I did not see him until 1 p.m. On entering the room I found him lying on his left side, with knees drawn up. His features were very anxious looking, pale and sallow. He could scarcely speak or move without intensifying the pain. Temp 99 F. pulse 108 weak, tongue foul, breath also foul. Had not passed flatus, nor urine for some time.
On examining abdomen I found the movements irregular. Slightly to the right and below the umbilicus the movements were imperceptible. Contour of abdominal wall irregular. On the right of the umbilicus it was full, on the left a well marked flattened depression existed. See Fig 15. Palpation; - a thickened resisitant mass extending in a slanting direction from the umbilicus downwards to the right. Over the thickening the pain was intense. It was extremely difficult to palpate or examine the patient on account of the great agony he was suffering. I injected $\frac{1}{2}$ gr. morphia hypodermically into the abdominal wall, and gave enema of olive oil and ordered hot fomentations to be applied.

I saw the patient every three hours that day and had to give injections of morphia $\frac{1}{4}$ gr. each time. Towards the evening the pain was so far abated that I could examine the abdomen more easily.

The swelling to the right of umbilicus became extended, the dulness increased upwards towards the left.

Rectal examination elicited nothing, not even an increase of temperature.

Dec. 25th 2 a.m. I was again sent for on account of the return of the acute paroxysm of pain. The patient's expression was very haggard, and exhausted looking.
He was lying on his right side both knees drawn up to the abdomen. There had been no movement of bowels, no flatus passed and no vomiting all this time. I injected 1/4 gr. of morphia.

I called upon Mr Cathcart early that morning and discussed the case with him. He saw the patient with me at 11 a.m. and expressed himself as certain that somewhere about the lower part of the small intestine there was a strangulation, and advised operation.

This was allowed and he made an incision in middle line below umbilicus. On opening the peritoneal cavity a very large quantity of bloody serum exuded. The lower part of small intestine - of which about four or five feet was of a dark brown congested colour - was found caught in a thick fibrous band. This was ligatured and divided. The bowel although dark was not considered gangrenous, and therefore put back into the abdomen.

The patient was placed in bed and warmth applied, but he never rallied from the shock. He died that same evening. A post mortem examination could not be got.
Remarks on Cases 14 and 15.

These two cases create a considerable amount of interest from the fact of the one being a complete and the other an incomplete strangulation. This interest is somewhat enhanced by a comparison of the details of the two cases.

After a careful enquiry into the history of both patients, I could find nothing in Case 15 to account for the presence of a band, but in that of Case 14 the patient had suffered from hernia for nine years, and left off wearing the truss just shortly before the attack.

Neither of the patients so far as they knew had ever been ill. The onset in both cases was sudden, and the pain continuous with exacerbations. The continuous character of the pain in that of Case 14 is not in keeping with the rule laid down by Treves Intestinal Obstruction p. 358 "that where the obstruction is but partial, the pain is distinctly intermittent, and the individual experiences intervals between the attacks of pain during which he is free from suffering."
While under the influence of morphia and opium the pain although subdued was never absent in either case.

It is interesting to note the regularity with which the patient in Case 14 was able to localise the pain to a point fixed on the abdominal wall corresponding exactly to that of the seat of obstruction.

The shortness of the constricting agent would account for this. In the case of the other patient the long band constructing the bowel admitted of too much changing of position of the gut to enable the patient to localise the pain definitely.

Vomiting set in, in case 14 some hours after the onset of the pain, in case 15 there was neither sickness nor vomiting from the beginning to the end.

It is difficult to account for this absence of vomiting where the pain was so severe, and the obstruction so complete.

The collapsed state into which the patient had so soon fallen might partly account for its absence, also as stated by Srinton Intestinal Obstruction p. 17.

"The lower the obstacle in the bowel, the longer is the segment of intestine to be distended,
as well as the path thereafter to be traversed by the returning liquids; and, therefore the later the faecal vomiting which they excite on reaching the stomach."

In case 14 the vomiting lasted for three days but never was faecal
Group IV. Obstruction by Growth.

A. Intra Mural Case 16.

B. Extra Mural Case 17.


Case 16.

On the 23rd of January 1894 I was consulted by Mrs R. S. Piershill Barracks about a "disagreeable fulness of the belly, obstinate constipation, and belching of wind with severe intermittent pain."

She was 46 years of age, married, had 13 of a family, of whom 8 are living, 5 dead, and also had 5 miscarriages. She had lived in India for ten years. Her health had always been good although she suffered much from tape worm, and had been troubled with constipation from childhood. During the previous eight days she had taken a large quantity of medicine to relieve the bowels, but with very little result, only a few pieces the size of walnuts coming away. She often suffered from diarrhoea after taking purgative medicine. The pain during the past few nights had been so bad, she had scarcely obtained any sleep. She suffered from thirst but was afraid to take fluid
on account of it setting up the belching.

I prescribed sedative medicine for the stomach, and advised her to use injections instead of purgatives. She either did not wish to use the syringe, or could not find it convenient to do so, as she took a teaspoonful of the fluid extract of Cascara. This gave her no relief and the following morning I was sent for.

Jan. 24th. I found her sitting by the fire, wearied and anxious looking. She had slept none, and the bowels had not moved. The paroxysms of pain were worse and more frequent. She could take no food and was feeling more swollen.

The abdomen was very much enlarged. There was dulness over the whole line of colon. The small intestine was somewhat resonant. The peristaltic action of the bowel was very distinct passing from right to left of the abdomen along the transverse colon. See Fig. 16. a.

Her pulse and temperature were normal. I ordered the nurse to give an enema of soap and water. I injected \( \frac{1}{2} \) gr. morphia and had hot fomentations applied.

I called in the afternoon and found that she had had several enemas with no result. Every time the enema was given, the pain became unbearable, and the
Revers Pain
Periosteal Wave
Cocoon
desire to get rid of it so great that not more than half a pint could be injected at a time. The ejecta consisted of the soapy water and small pieces of faeces of this size and shape.

I tried to give the enema myself in case the previous ones had been given too hurriedly or too hot.

When I had injected less than half a pint, the pain became so severe and the desire to get rid of it so strong I had to desist. The flatulent distension became very great. She had passed flatus, when the enemata were given but did not remember doing so at any other time.

Jan. 25th 10. a.m. Still very ill. Had no sleep. She had vomited dark brown liquid - not faecal, the flatulent belching worse, pain worse, abdomen more distended, no motion, but great desire at times. Severe spasms set up at these times, followed by belchings. Urine small in quantity and high in colour. I injected ½ gr. morphia and 1/100 gr. Atropia. Continued the hot fomentations over the abdomen.

4. 30. p.m. Abdomen still more swollen. Pain slightly relieved, spasms still come on, and belching continues. Position of swelling changed. Fig. 1b. 3

Tried another enema, but before ½ a pint was
injected, it was rapidly ejected, the pain intensified and a vomit of dark fluid came on.

7. 30. P.M. Abdomen larger. Position of swelling again changed. Vomiting and retching. I injected $\frac{1}{2}$ gr. morphia and diminished fluids by the mouth.

Jan. 26th 8.30. A.M. Patient passed very uneasy night. Pain was less severe, pupils contracted. She was under the influence of morphia. Belching still bad, had vomited once during the night.

Abdomen larger, position of swelling again changed. Nothing felt per rectum. I ordered the slow injection of olive oil.

4 P.M. Patient no better. The effects of the morphia had passed off so that pain and spasms had returned. Eructations and belching still continues. The enema of olive oil (1 pint) had been retained for 3 hours and brought away small pieces of faeces.

I asked Mr Cathcart to see the patient with me. He examined her most carefully. He thought the swollen condition of the abdomen due to the enormously distended colon - the visible peristalsis due to blockage at the Splenic flexure; that while it might be faecal, it was more like a constriction of the gut by malignant disease, or by band. If after another enema be given there should
be no motion, and the symptoms not abated, he would advise operation.

7.30. P.M. Symptoms still the same. Injected \( \frac{1}{4} \) gr. morphia.

Jan 27th. 8.30. A.M. Temp. 99°. 4F pulse 96 fairly strong. Patient passed a quieter night. Abdomen larger, vomited once, but no motion. Tried another enema of olive oil but spasms so bad and painful I had to stop. Attempt to defecate very strong but very painful. The oil brought away small pencil shaped pieces of faeces.

2.30. P.M. Mr Cathcart opened the abdomen in the middle line; on opening the peritoneum a quantity of blood stained serum escaped. The transverse colon enormously distended and situated far down the umbilicus and pubis. Could not ascertain the seat of stricture on account of distension of bowel. In order to get at the structure he punctured by means of trocar and canula what he thought was the transverse colon, but what was eventually found to have been the Coecum, and allowed a large quantity of flatus to pass out. The splenic flexure of colon was drawn out and found free. At the lower part of the sigmoid flexure the gut was found to be contracted by a dense scirrhous growth.
Mr. Cathcart stitched that part of the colon immediately above the constriction, to the opening in the abdomen leaving the bowel unopened till the next morning.

9.30 P.M. Temp 99.8°F. pulse 104 very good. Painful spasms very frequent. Belching bad during evening. Thirst intense. Gave $\frac{1}{4}$ gr morphia hypodermically and ordered $\frac{1}{8}$ gr pil opii every four hours. She vomited large amount of dark bad smelling fluid during the evening.

Jan 28th. 8.30 A.M. Temp 99.1°F. pulse 96 good. Patient had restless night on account of eructations and spasms. The spasms not so painful. Thirst intense. Peristalsis visible, wound looking well. Mr. Cathcart made artificial anus explored the interior of bowel by finger, got rid of some hard formed masses, felt the lumen of the lower portion of the bowel almost entirely closed. Before the wound was dressed two large motions came away, dark brown thick poultaceous matter, and a large amount of flatus.

5 P.M. Temp 99.4°F. pulse 132 weak and thready complains of syncopal attacks, difficulty in passing water, slight delirium, restless, intense thirst. Had other two very large motions, same
consistence as before. Small quantity of dark matter coming by mouth. Stimulants given.
10.30 P.M. Temp 99.8F. pulse 120 stronger. Patient very restless, tossing about, another large motion, wound looking well. Patient evidently suffering from the effects of morphia and chloroform.

Jan 29th. 8.30 A.M. Temp 98o.2F. pulse 94.
Patient fairly well during night. Had taken small amount of liquid nourishment. She looks slightly jaundiced and very sleepy. Ordered small quantities of farinaceous food at short intervals, also beef tea. She had two good thick motions, brown in colour. Difficulty in passing urine - bilious.

9.30 P.M. Temp 97o.8F. pulse 96 fairly good.
Tongue red slightly dry. Spitting more dark matter. She could not take farinaceous food nor chicken broth - the latter brought on severe vomiting.
Ordered milk and lime water.

Jan 30th. 8.30 A.M. Temp 97o.8F. pulse 94.
Patient had fairly good night, no more vomiting and no motion. Jaundice more pronounced, very sleepy, had not taken much nourishment. Tongue dry, red, very thirsty. Ordered a mercurial and saline purge. Wound dressed, doing well.
8.30 P.M. Temp 98.8 F. pulse 88 good.

Had two slight motions, with one of the motions a piece of tape worm came away. Could not pass water had to be taken off with catheter.

Jan 31st. 8.30 A.M. Temp 970.8 F. pulse 96 good.

Patient had good night, passed urine well in large quantity and lighter in colour. Had large motion during night. Tongue dry, red at edges, brown in centre. Still declines much nourishment. She complained of pain in line of stitches. The stitches were removed, slight suppuration in their track, otherwise wound doing well.

4.30 P.M. Temp 970.8 F. pulse 112 not so strong as in the morning. Patient not feeling so well, sleepy, passed urine, had another motion with piece of tape worm in it, in dressing the wound we noticed a small piece of worm in the aperture of the artificial anus.

Pain relieved since the stitches were taken out.

Ordered as a tonic, Tincture of Nux vomica, Ammonia Carbonate, and tincture of orange.

7.30 P.M. Temp 98.2 F. pulse stronger. Looks better and feels better. Took more beef tea and chicken broth than usual, also milk and lime water.
Wound dressed - still keeping well -

Feb. 1st. 3. 30 a.m. Temp 97°.8F pulse 112 soft regular, weak. Pupils dilated, conjunctiva jaundiced. Patient had restless night, wandering, drowsy, apathetic, no appetite, would only take food if put into her mouth. Tongue red, dry, glazed, always spitting up brown glazy mucus. Face very flushed especially round the malar bones, rest of body jaundiced more than usual. If spoken too, she spoke heavily in answer, breathing heavily also. Bowels not moved, passed water several times - bilious. Ordered a mercurial and saline purge. Wound dressed - doing well.

7. 30 p.m. Temp 98°F, pulse 120 soft regular tongue still dry and glazed. Slept more or less all day, but not sound sleep. She had very little nourishment, took notice of no one, no motion, passed urine. Wound dressed - doing well.

Feb. 2nd 1. 30 a.m. Mr Cathcart and I were sent for as a change for the worse had set in. Patient delirious, unconscious, constant rolling of the eyeballs, stertorous breathing, retching of dark grumous fluid, tossing about of lower limbs.

Temp 98°. 1 F. pulse 124 weak regular, jaundiced increased.
Enlarged sacculum with small part of ascending colon.
increased, pupils dilated, breathing 44 per minute.
Unable to account for the change. Possibly collapse.
Ordered brandy every hour.
8.30 a.m. Temp 99°F. pulse 132 very weak.
Respiration 44 per minute. Patient moribund.
4 p.m. Temp 99°F. pulse 152 respiration 52.
6 p.m. Patient died.
Feb. 3rd. Mr Cathcart and I were requested by the husband to make a post mortem examination.
Result 1. No signs of peritonitis around, or in the neighbourhood of the wound.
2. Large amount of purulent serum in the pelvis, which had apparently trickled down from the lower corner of the wound.
4. Portion of descending colon above the wound and transverse colon contracted. The coecum enormously enlarged, held 42 ozs of fluid. Fig. 1b.
5. At lower part of sigmoid flexure an annular thickening 1½ inches in length and involving the whole thickness of the gut, and narrowing the lumen so as barely to admit a pencil point. The wall of the gut above the constriction greatly hypertrophied, and the lumen dilated, forming a circular pouch. Fig. 16.
Constriction of gut
Microscopically the growth consisted of "Cylindrical called Cancer."

6. Liver pale fatty, flabby, gall bladder full and distended with bile, contained a small gall stone the size of a large pea.

7. Stomach kidneys, pancreas, and spleen healthy.

8. Both ovaries contracted with calcareous looking deposits on surface, small cystic growth on border of ligaments.
Remarks on Case 16.

I attended this patient in her confinement four months previous to this illness. It was an exceptionally easy labour, and she made a rapid recovery. She complained at that time of being costive, but did not emphasise the fact in such a way as to lead me to think of obstruction. The abdomen after labour did not seem as if the bowels were in any way unduly loaded. She mentioned how much she had been annoyed by tapeworm, but would not submit to treatment for it, as she thought so much had been tried with her already. She was very anxious to nurse her baby, and she thought the medicine would affect the child.

The statement she made to me the first night she came to my consulting room that she passed pieces the size of walnuts, misled me as to the true nature of this patient's complaint. This accounted for the treatment by Cascara Sagrada. These rounded masses must have been formed in the lower part of the rectum by the accumulation of the smaller pencil shaped pieces which I saw afterwards
in the ejected enemas.

After a careful examination of the abdomen and rectum, and watching the gradual increase in size, and change of position of the colon, during the peristaltic waves as illustrated in the diagrams. It was very evident we had to deal with an obstruction of some kind situated somewhere about the splenic or sigmoid flexure. On watching the abdomen during a peristaltic action, the wave could be seen passing in the direction of the arrow see Fig 16a. and suddenly disappear from the abdominal wall at the points figured.

The large swelling immediately below the umbilicus was thought to be the transverse colon greatly distended and bent downwards.

During the operation this supposed distended transverse colon had to be punctured in order to reach the obstructed portion of bowel.

At the post mortem it was found that the puncture had been made in the coecum, and the swelling was due to this part of bowel occupying a large portion of the umbilical and hypogastric region. Diagram is an exact outline of the Coecum and part of ascending colon. When filled with
water it contained 40 ozs. A further aid to the diagnosis was the presence of the small pencil-shaped pieces of faeces in the ejected enemas.

Mr Cathcart and I were unable to discover the cause of the vomiting and the rapid weak pulse which continued after the operation, while the temperature all along remained about the normal. At first we were inclined to blame the morphia and opium and we stopped them. There was no tenderness of the abdomen or tympanitis now to indicate the presence of a peritonitis. At the post mortem nothing could be detected to account for the collapse and death.

Feb. 16th 1893. Was asked to see Mr. W. R. aged 28 residing at Piershill, who was said to be suffering from "stoppage of the bowels".

His father and mother are alive and well. Had one sister who died at nine months old from inflammation of the bowels.

His fraternal grandfather died at the age of 87 and grandmother at 68. His maternal grandfather died at 68 and grandmother still alive age 64. He never was ill himself until the month of November 1892 when he suffered from typhoid fever, and was off work for 6 weeks. Previous to that he had been in good health. A fortnight before he took the fever he was staying with his grandmother, where typhoid fever had been.

He went to bed on the 15th quite well. In the middle of the night he was awakened by "sharp pain in the belly" and a "sense of sickness." He had two motions at short intervals immediately after the
onset of pain. Has had no motion since then. He slept very little after that. He went to work at 6 a.m. but felt very ill and vomited. He returned home at 9 a.m. for breakfast when he took a little porridge. He returned to work, the vomiting set in again and continued at short intervals till 1 p.m. Took no dinner, went to bed, kept vomiting at very short intervals. Vomited matter consisted at first of food, then dark green liquid - bile stained. He complained of pain along the epigastrium.

When I saw him he was in bed. There was a deep purple flush on both cheeks with pale whitish green tinge down each side of nose, and round the upper and lower lips. Tongue red at edges, brown in centre, and slightly dry. Temp 99° F. pulse 84 good respiration 28. He vomited large quantity of dark bilious fluid offensive in smell - could not say it was faecal. There was now no pain, or very slight on hard pressure.

The abdomen was well nourished; its movements very much restricted all over, the lower part especially at centre and towards the left see Fig 17 a. On Palpation, could feel a large irregular mass situated above the bladder, and extending in
the line of sigmoid flexure, and descending colon. A considerable amount of gurgling could be heard above and to the right of umbilicus.

Per rectum; The finger felt a large conical projection extending into the rectum, there was no blood or mucus. It was sensitive to touch. Provisional diagnosis - resembles Intussusception. I gave sedatives to allay the vomiting, hot applications were applied, and hypodermic of morphia to keep down peristalsis. I gave several enemas of soap and water at varying intervals, but each was rejected immediately. I tried a slow injection of olive oil, but very little was retained. Seeing the patient's condition was not improving, I had him removed to the Royal Infirmary in the evening of the 17th. He was there carefully examined by Mr Alexis Thomson in the absence of Professor Annandale. Mr Thomson also concluded there was a condition of intussusception present, and operated for that.

He opened the abdomen by an incision in the middle line "a" see Fig 17 B. and found the peritoneum and intestine so matted with a thick tubercular deposit that he was unable to reach the
interior of the peritoneal sac. He then made another incision at "b" Fig 17 B. with the same result. He then thought it best to make an incision at "c" Fig 17 B. and thus reach the small intestine with the view of forming an artificial anus. A loop of small intestine 3 feet from the ilio-caecal valve was stitched to the abdominal wall.

The patient made an excellent recovery. Within a fortnight the natural channel became patent, and the artificial anus was allowed to close.

April 1894. This patient has increased in weight by 20 lbs, works daily at his employment as engineer is a member of the Volunteer Corps, and has enjoyed excellent health ever since his recovery.
Remarks on Case 17.

There is no doubt case 17 was one of genuine intestinal obstruction, brought about by tubercular peritonitis of a chronic character, possibly matting together the coils of bowel or producing kinking.

Undoubtedly there were absent some of the usual symptoms of Intussusception, but the presence of the nose shaped projection which was sensitive to touch, the sudden onset of pain, and the gradual subsidence of it, the persistant vomiting, and the swelling in the abdomen, made me feel certain I had to do with a case of invagination.

Mr Thomson was also led to the same diagnosis from these symptoms.

Treves asserts that in the course of an attack of tubercular peritonitis, acute intestinal obstruction may occur, and that "the manifestations of the disease develop very gradually, and the patients are usually first seen when suffering from great debility and ascites." Intestinal Obstruction p.411.

This patient was in excellent health when the attack came on, suffering neither from debility or
ascites.

There was nothing in his family history to indicate the possibility of a tubercular nature. He had never been ill up to the time he was attacked by typhoid fever. I am well aware of the possibility of mistaking a tubercular for a typhoid condition, but I had no doubt as to the nature of the case, the symptoms of typhoid being very well marked.
Group V. Appendicitis:

A. Acute, Cases 18 and 19.
B. Recurrent Cases 20 and 21.
C. Simulated, Cases 22 and 23.


Case 18. On Wednesday Feb. 28th 1894, I was asked to see Mr A.H. residing at Restalrig. I got the following history. He is 20 years of age, a barber to trade, was in good health when he rose on Tuesday morning. While at breakfast he was seized with pain in the right side, it came on slowly and wore off again, on his way to work at Portobello. About 11 a.m. it got worse, by 1 p.m. a sense of swelling came on, he had to go to stool, the motion was hard and painful. He took dinner and immediately after was seized by pain in the epigastrium, the pain was so severe as to double him up. He vomited eight or nine times before 9 o'clock. He was taken home at 4.30 p.m.

His mother said he was very white and could not straighten himself. He vomited twice after he got home. The vomited matter consisted of food
Fig. 18.

Painful point = \(0\frac{1}{4}\) inch below inner end of line 2\(\frac{1}{4}\) inch long, drawn horizontally from anterior superior spine, process of ilium.
and some watery liquid. His mother applied hot fomentations, gave him castor oil and brandy, then at 1 a.m. gave him 2 Gregory’s pills but all gave him no motion or relief. I was sent for and saw him at 9 a.m. He was lying in bed on his left side his face flushed, knees drawn up, tongue brown in ventre, and red at edges. Temp 99°.2 F. pulse 108 well filled, respiration short and interrupted.

On examining the abdomen I found the recti, especially the right, restricted in action; over the right iliac region the movements impaired.

Palpation;— Slight pressure over caecal region gave rise to pain. Deep pressure at point "a" Fig 18 intensified pain. At this point "a" the finger could feel elongated nodule, painful on pressure. Around this there was thickened resistance. Percussion gave a slightly dull note.

Provisional Diagnosis;— Appendicitis.

I saw Mr Cathcart about the case, and described the symptoms to him. He concurred with my diagnosis and kindly saw the patient with me. After examining him he felt sure we had to deal with a severe case of acute appendicitis, and operated at 11 a.m. that same forenoon.
An incision was made along the right semilunar line "b" "c" Fig 18. The appendix when brought to the surface was found to be extremely dilated, dark red, and in places dark and gangrenous. There was some lymph on surface, and yellow spots from within. When laid open it was found to contain a dark fluid; two thick bristle like hairs and a concretion the size of a large orange pip.
The mucus lining of the swollen part was of a dark green, almost black, sloughy, but without any actual perforation. The appendix was removed and the wound dressed.
4 p.m. Temp 98°F. pulse 70, tongue coated, thirsty, pain at wound.
7.30 p.m. Temp 97°.8 F. pulse 72 strong slight sickness present, pain over wound severe.
Ordered morphia suppository $\frac{1}{4}$ gr.
March 1st 8.30 a.m. Temp 98°.7 F. pulse 72, well filled, regular, tongue moist, yellow coating, face flushed, pupils slightly dilated, feeling better. Had several attacks of vomiting during the night, vomited matter dark green, passed about 40 oz of high coloured urine.

Wound dressed, considerable amount of serum
oozed out during the night. Movements of abdominal wall better.

I ordered Bovinine teaspoonful every alternate hour with milk and potash between.

4 p.m. Temp 98°.2 F. pulse 72 tongue cleaning, face flushed, irritable cough present, passed flatus ordered poultice for cough also Mellin’s food in milk every three hours.

7 p.m. Temp. 98°.2 F. pulse 74 strong.

Slight jaundice present, cough better and sleeping well.

Mar 2nd. 8.30 a.m. Temp 97°.4 F. pulse 74 strong tongue coated, conjuntiva yellow, vomited dark green bilious fluid during the night.

Ordered a mixture of rhubarb, bicarbonate of soda, and calomel to be followed by saline.

Wound dressed.

6 p.m. Temp 98°.1F. pulse 60 regular strong.

Slept well, passed urine still high coloured and bilious with large deposit of urates; vomited ½ a pint of dark green bilious fluid, no pain and no motion.

March 3rd. 8.30 a.m. Temp 98°.1 F. pulse 72.

No motion but feels well. Gauze drain taken out
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<th>Temp.</th>
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<th>Diaper</th>
<th>Stools</th>
<th>Alimentation</th>
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NG = Normal, NS = Normal, R = Regular
and tube put in. Gave enema of soap and water.
7 p.m. Temp 98°.2 F. pulse 68 good no motion.
March 4th 8.30. Temp 98°.1 F. pulse 74 good
drainage tube taken out - wound doing well.
Ordered Rhubarb, Soda, and Calomel to be followed
by a saline.
7 p.m. Temp 98°.2 F. pulse 72.
March 5th Temp 97°.8 F. pulse 84. No motion
ordered a saline.
7 p.m. Temp 98°.1 F. pulse 60 good. No motion
Gave enema of soap and water.
March 6th. 8.30 a.m. Temp 97°.6 F. pulse 80 strong
had two motions - dark brown, poulticous. All
stitches taken out, wound supported by plaster.
Urine clearer.

There was nothing further of importance in
this case, the patient made a good recovery. Was
out at the end of 4th week.

Case 19. Thomas C. aged 22 clerk, residing at Royal Park Ter. went to bed in excellent health on the night of March 5th 1894. About 3 a.m. he was awakened by a tight feeling across the belly; followed by pain in the epigastrium and vomiting. The vomited matter consisted of undigested food, then greenish yellow bilious matter. The pain then shifted into the right iliac region, and lasted all night, vomiting also continued. In the morning I was sent for and saw him at 9 a.m. on the 6th of March 1894. I found him lying on his back the expression of his face did not at all indicate suffering. He had a bright clear complexion, tongue slightly coated, temp 98° F. pulse 72 fairly well filled, bowels moved the previous evening.

I found on examining the abdomen that the respiratory movements were diminished on the right side, especially over the caecal region. Palpation, about an inch and a half below the Anterior Superior, Iliac Spine and about the same distance internal to the spine, the palpating
Rigot's Point
Septum palpable here.
finger could detect a small nodular mass, soft feeling like an elongated gland, and very painful. This was the most painful point. Around this point percussion elicited a dull note. Deep pressure intensified the pain see Fig 19.

Provisional Diagnosis; Appendicitis beginning.

I injected $\frac{1}{2}$ gr. morphia subcutaneously over the painful part. Had a talk with Mr Cathcart about this case. He was inclined to think from the description I gave him of the symptoms that it was one of commencing appendicitis. He very kindly saw the patient twice with me in the evening.

4.30 p.m. Temp 99°.2 F. pulse 60. Patient slept since I saw him last. The dulness slightly increased, the movements more impaired. No vomiting, no retching, and no motion.

6.30 p.m. Temp 100°. F. pulse 74 Not so regular fairly well filled, no motion, no flatus passed since morning. Pain continued but not so severe. Tenderness in pouch of Douglas. Mr. Cathcart examined him and his diagnosis was Appendicitis.

10.30 p.m. Temp 102° F. pulse 90 irregular the area of pain extending, abdominal movements still more restricted on the right side. I injected
This part was dried. The arrow is shown here.
¼ gr. morphia hypodermically.

March 7th 9 a.m. Temp 100°.2 F. pulse 96 soft regular. Slept well, tongue thickly coated passed flatus, but no motion. Took milk and beef tea fairly well.

Abdominal movements still more impaired area of dulness increased, area of pain increased surface more tender to touch. Pressure on left side of left rectus produces pain in right iliac fossa. Tenderness in pouch of Douglas not so distinct.

11 a.m. Mr Cathcart operated. He opened the abdomen by an incision at "a" see Fig 19. On opening the peritoneal cavity a considerable amount of serum escaped. He had considerable difficulty in finding the appendix. When found it was bound down deeper than usual in the iliac fossa, and when freed and brought to the surface it was from three to four times its normal size. The distal two-thirds was very much inflamed, almost black at places and full of fluid. On opening it, the mucus membrane was beginning to slough, and across the middle of the cavity, the mucus membrane was thrown into a distinct fold or valve. The root of the appendix was removed and the wound dressed.
4.30 p.m. Temp 101°.5 F. pulse 84 fairly good
much pain restless and thirsty. I ordered morphia
suppository and milk and potash to be given at
short intervals.
9 p.m. Temp 100°.3 F. pulse 90 irregular,
fairly strong. Felt pain over area of stitches.
Restless, felt faint, ordered a little brandy every
tyhree or four hours.
March 8th 9 a.m. Temp 99.7 F. pulse 84 stronger
tongue covered with thick fur. Urine high coloured.
Had fairly good night.
Wound dressed, doing well.
3 p.m. Temp 100°.3 F. pulse 88 strong, irregular
feeling well, taking milk and beef tea.
March 9th 8.30 a.m. Temp 98°. F. pulse 83.
fairly strong. Had very restless night, tongue foul
coated, breath smelling badly; no motion since 5th.
Wound dressed - looking well. Movements of ab-
domen better. Ordered Calomel VI grs. to be
followed by saline. Mouth to be washed by weak
 carbolic lotion, milk and beef tea at short intervals
3.30 p.m. Temp 99.7 F. pulse 80 good bowels moved
Records of Temperature, Pulse, Respiration, Stools and Urine from 8th Day of March 1894.

In the case of N. C. Aged 22, Occupation Clerk, Result Recovery.

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Day of Month: 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Day of Disease: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Normal Temperature of Body: 98°

Pulse: 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80
Resp.: 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
Stools: 1

Diagnosis: Cholera

Notes: 8th Feb. for 1st time.}
once - motion dark, lumpy and offensive.

7 p.m. Temp 99°.3 F. pulse 80 strong.

March 10th 9 a.m. Temp 97.7 F. pulse 80. Had good night - no motion - ordered Calomel again.

7 p.m. Temp 98°.4 F. pulse 80 good. No motion.

Vomited about 3 hours after the Calomel. The vomited matter was sour yellow liquid. Patient retains his milk and beef tea well.

March 11th. 8.30 a.m. Temp 98° F. pulse 80. Wound dressed, tube taken out, No motion, Ordered another Calomel and saline.

March 12th 10 a.m. Temp 97°.3 F. pulse 80. Patient doing well bowels moved once.

7 p.m. Temp 98°.4 F. pulse 78.

March 13th 8.30 a.m. Temp 97°.6 F. pulse 72. Wound dressed, doing well, bowels moved once.

7 p.m. Temp 98°.4 F. pulse 74.

March 14th 9 a.m. Temp 98°. F. pulse 72. March 15th 10 a.m. Temp 98° F. pulse 80 good.

The patient made an excellent recovery and was able to leave the house at the end of four weeks.
Areas of Denude.

Most painful point 1½ in below inner end of a line 2 in long drawn from Anti. Surf. Line Spine.
Case 20. Recurrent Appendicitis - Recovery.

Case 20. Miss F aged 23 residing at Lilyhill Terr had to leave her work on the 27th of April 1893 on account of acute pain, which came on in paroxysms across the epigastrium and then became fixed in the right iliac region. She had had similar although slighter attacks before this.

She is stout and healthy looking. Slightly costive but seldom requires medicine.

When I saw her, her temp was 99° F. pulse 96 full, tongue furred, no sickness, no vomiting. The urine contained large quantity of urates. She had always been regular in menstruation.

The abdomen was full, rounded, movements distinctly impaired on the right side over the seat of pain see Fig 20.

Palpation;— A doughy thickening could be felt corresponding to "a" Fig 20, also a nodular small mass could be detected by the finger at the lower part of this area. A dull percussion note was also obtained at this part. Diagnosis;— Recurrent Appendicitis. I injected ½ gr morphia, gave an enema of olive oil to relieve the bowels, ordered
hot fomentations to be applied, and small quantity of liquid food at short intervals.

April 28th. Temp 100°F. pulse 90 tongue moist, a little cleaner. Pain still severe, bowels not moved. Local dulness slightly increased, tender on pressure. I ordered \( \frac{1}{2} \text{ gr pill opii} \) every four hours.

April 29th. Patient had restless night. Had a large poultaceous motion. The local pain less, but area hard, resistant, especially at lower part.

April 30th. Patient had another motion soft and dark. Temp 99°F. pulse 86 felt easier, opium pills continued. No increase of dulness.

1st May. Temp 98°F. pulse 82. Had another small soft motion. Keeping fairly well.

May 2nd. Temp 99°F. pulse 86. Patient much easier, had another soft motion.


May 4th. Had large soft motion, no pain.

Rested well during night, felt a little more inclined for food.

May 10th. Patient greatly better. The inflammatory area very much diminished.
The movements of abdominal wall freer.

May 15th. Patient up to-day. Bowels acting well.

Was asked to see David R. residing at Abbeyhill on April 9th 1894. The patient complained of pain in lower part of bowel.

He is 55 years of age, married, an engineer to trade. Tawny complexion, fairly well built, and had always enjoyed good health until two years ago when he had the first attack of this nature.

When young he took a glass freely, but for many years had been very temperate in his habits. His appetite always fairly good. His bowels have been constipated, he tries to have a motion every day, but nearly always requires medicine.

Two years ago he had an acute attack of pain in the right side of the belly low down. The Doctor who attended him called it Perityphlitis. Since then he has had repeated attacks at intervals, but has never vomited since the first time.

He was quite well on Thursday April 5th. On leaving work that evening he felt uneasy. After being in bed sometime he was awakened by sudden
severe griping pain in bowels on right side, and darting down to testicle. It was very bad. His wife applied mustard and linseed poultices for a day or two. He took three castor oil pills, a penny's worth of Gregory's mixture, a Seidlitz powder, and hot gruel, all to make the bowels move. They moved three or four times. The motions were dark and very thin.

He became somewhat better, and got up to go to work this morning (April 9th) but the pain came back. When I saw him his temp was 99° F. pulse 84. Skin moist, and tongue yellow coated. There was a distinct flattening of the abdomen over the right iliac and lumber regions. This area was restricted in its movements. See Fig 21.

Palpation. A thickened mass about 2 inches in size and 1\frac{1}{2} inches broad could be distinctly felt. It occupied an oblique position midway between the Anterior Superior Iliac Spine and the Umbilicus. This area was painful on pressure. This area also dull on percussing. There was distinct resonance over the upper part of ascending and whole of transverse colon.

The pain in this area was intensified on passing
water. The urine was high coloured, and contained urates.

I noticed that the patient could sit up without producing pain, and when asked to bulge out the abdominal wall, he could do so without discomfort to himself.

The diagnosis lay between recurrent appendicitis and impacted faeces in coecum, setting up an inflammation of the muscular wall.

I gave a distending enema of 40 ozs of olive oil.

April 10th. Patient had three motions since last night. The first consisted of oil and several hard pieces the size of plums.

About midnight before the second motion came away, he experienced great pain along the ascending and transverse colon. He said the pain was so violent he had to hold on to the bed rails till the spasm passed off.

Shortly after this the bowels moved.

The motion was kept that I might see it. I found it consisted of oil and three hard pieces of faeces three inches long by 1\(\frac{1}{2}\) inches in diameter. I broke them up and found them very hard in the centre.
Patient said he felt another man after getting away these hard masses.

He had another motion soft and poulticeous. I gave him another enema of oil like the first, which brought away later on two soft motions. He had no pain now in passing water.

The mass was not so round and hard but there was distinctly inflammatory thickening over the lower part of the coecum which gave a distinct gurgling sound on pressure and evidently the remains of the previous typhlitis.

From the time the patient passed those large masses he has never used medicine, and feels better than he has done for a long time.

Miss R. aged 18 years residing at Wilfrid Ter, Parson's Green, complained of pain in the right iliac region, shooting towards the right lower rib.

With the exception of slight swelling of glands in the neck, which passed off soon, and appeared to be due to bad teeth, she always has been in good health.

On the 9th and 10th of October she felt slightly out of sorts, but could not say there was anything definitely wrong with her.

On Sunday evening the 11th October while at Church, she thought she got cold, she felt pain on the right side and on getting home became sick and vomited a lot of green bilious matter. Her mother gave her Castor oil and seidlitz powder to move the bowels, but with very little result. The vomiting lasted more or less till Monday evening the 12th and the pain gradually became worse.

On the 13th the vomiting had ceased but the pain was much worse. Her mother applied hot poultices but she got no relief.

On the 14th October 1891, I was called in to see her.
She was in bed. Her face pale, anaemic looking, tongue moist, coated all over, thirsty, no appetite, no headache but bowels constipated.

Temp 99.6F. pulse 104 fairly strong and regular.

Clammy sweat all over the body.

On examining the abdomen I found the abdominal wall well nourished and well rounded. Movements restricted on the right side at the lower part.

Palpation showed the descending colon apparently loaded with feces. In the right iliac region an area corresponding to 1. on Fig 22a, there was a thickened resistance and sensation very painful on pressure. Other parts were resonant.

Percussion gave a dull note over this same area.

I injected \( \frac{1}{2} \text{gr} \) morphin hypodermically, ordered hot fomentations; the colon washed out by enema of soap and water, and \( \frac{1}{2} \text{gr} \) pil opii to be given every four hours.

Diet, milk and potash, chicken or beef tea.

Oct 15th 9 a.m. Temp 100.4F. pulse 112 regular fairly strong. Pain not quite so bad, tongue coated thirsty, bowels not moved.

The area of dulness had extended upwards as shown at "2" in Fig 22a.

Movements more interfered with, and this area dis-
tinctly raised.

6. p.m. Temp 101°.8F. pulse 124. Not so strong since morning.

Oct. 16th 9 a.m. Temp 99°.4F. pulse 108.

Had fairly good night, tongue foul, dulness extended point marked "3" Fig 22a. slightly more painful.

Her mother had given castor oil but bowels not moved.

7.30. p.m. Temp 101.2F. pulse 112 stronger.

Tongue cleaner, thirst less, bowels moved twice in day time, had copious discharge of offensive dark faeces.

Pain less in abdomen on account of opium, stopped it now, but pain present in right thoracic region near lower ribs. The dulness on the left side gone.

On the right side the dulness was extending and a visible bulging seen at point 1 in Fig 22a. opposite the Anterior, Superior spine and slightly below.

Oct 18th. 3 a.m. Temp 100°.2F. pulse 104 not so full. Tongue cleaner, not so thirsty, no motion;

The bulging and tenderness on the right side greater, and the area of dulness extended as shown at point 4 Fig 22a. Asked Mr Cathcart to see the patient with me, as the local conditions were not improving.

He saw her in the afternoon and after examination
thought there was present a condition of Perityphlitis from disease of the Vermi appendix.

Oct 19th 9 a.m. Temp 100°F. pulse 112 not so strong. Patient had fairly easy night. The area of dulness extended now towards the umbilicus and pain on pressure greater. Had no motion. Carbolised cloths over part all night.

4 p.m. As symptoms of localised peritonitis were increasing Mr Cathcart cut down in right semi lunar line at 1.2 Fig 22b. On opening the Peritoneal cavity a large quantity of fluid escaped which was clear and dark brown in colour like prune juice. It formed a collection round the coecum and ascending colon and was separated by recent adhesions from the rest of the Peritoneal cavity. The vermiform appendix however seemed healthy and was not interfered with. The case seemed to be one of Perityphlitis of uncertain origin, and possibly due to the faecal accumulation in the Coecum which had been evacuated before the operation - the effects alone remaining.

7.30 p.m. Temp 98.3°F. pulse 104 fairly well filled. Tongue cleaner, no pain, feeling comfortable.

Oct. 20th. 9 a.m. Wound dressed. Temp 98.2°F.
pulse 96 much stronger. Tongue cleaner, not thirsty. Slept well. Took good supply of milk and beef tea during the night.

8. p.m. Temp 98°.7F. pulse 98 good. Had good sleep during the day; no pain or discomfort. Patient in good spirits.

Oct 21st. 9 a.m. Temp 98°.F. pulse 90 good.
Feeling well, and taking nourishment well. No motion. Wound dressed.

7 p.m. Temp 96° 2F. pulse 89.

Oct 22nd. 9 a.m. Wound dressed, still improving.
Temp 98° F pulse 80 strong.

7 p.m. Temp 96°.3F. pulse 86 good.

Oct 23rd. 9 a.m. Temp 96°.1F. pulse 78 good.

Had good night's rest. Drainage tube taken out.
Wound doing well. Thickening of abdominal wall greatly diminished. On the left side of the rectus muscle there was a feeling of hard resistance, possibly faeces. Ordered castor oil.

7 p.m. Temp 98°.F. pulse 80 good. Had two large motions. One at 12.30 p.m. semi-solid with some hard nodules, the other at 6 p.m. consisting of large quantity of dark brown offensive faeces, with four pieces so large and hard as to produce great pain on passing. After this came a small quantity of
Records of Temperature, Pulse, Respiration, Stools and Urine from 14th Day of October 1894

In the case of Miss J.
Aged 18 Occupation Recovery

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- Onset of illness
- A. Medicine
- A. Confusion

- Stools: L. L. L. Urine: 2. 2.

Steady recovery
semi-fluid faeces, less offensive and brighter in colour. From this date the patient made an uninterrupted recovery - and has enjoyed excellent health ever since.
Case 23. Local Tubercular Peritonitis -
Simulating Appendicitis - Operation - Recovery.

May 22nd 1890. Called to see Miss B.C. milliner, residing at Jock's Lodge, said to be suffering from "obstruction of the bowels."

She was 27 years of age, suffered from constipation, and frequently required medicine.

She had always enjoyed good health until the last two years. She had been falling off since then without apparent cause. Two weeks before this attack she had pain in the right iliac region but it passed off.

On the 20th and 21st she had diarrhoea without apparent cause, and on the 22nd before I saw her, a natural motion. For some weeks she had been kept at business from early morning till midnight as it was her busy season.

Her father died at 60 from Bronchitis, her mother still alive and well, over 70 now. Her only brother died of phthisis at the age of 20 after a twelvemonth's illness. She has three sisters older than herself, all in good health.
On the forenoon of the 21st May, while passing through St. Andrew Sq. she was seized by an acute pain in the right side. It nearly made her "cry out" She sat down for a little, the pain became less, she was able to transact her business, and return home. Although the pain was there all day she remained at business till 11 o'clock at night.

After supper and going to bed the pain became unbearable. Hot fomentations, poultices, and turpentine stupes were applied all night but with no relief. Castor oil was given, shortly after which vomiting set in. The vomited matter consisted first of food and then of dark green bilious fluid. The vomiting and retching continued more or less all night.

Her condition becoming worse I was sent for at 8.30 a.m. on the 22nd.

When I saw her she was lying on her back with right knee drawn up. Her face full, flushed, but anxious looking. Her tongue coated with thick yellow fur, thirsty, very sick.

Temp 100° F. pulse 128 fairly strong. breathing 30 per minute.

I found on examining that the abdominal wall
was well nourished, there were marks over the umbilicus and between umbilicus and left iliac spine caused by the large blisters and the prolonged use of turpentine. The abdominal wall was markedly raised over an area of about 2 inches, situated midway between anterior superior, iliac spine and umbilicus Fig 23a. The movements were diminished. On palpating I could feel a boggy mass extending from level of right iliac spine upwards and slightly backwards into the lumbar region see Fig 23 B.

This part was easily distinguished from the rest of the ascending and transverse colon which gave a feeling of fulness though not so distinct as that of "F" Fig 23 B.

Slight sense of resistance also felt over the area already described.

Percussion elicited dulness along transverse colon and descending colon, but especially well marked over the area "f" Fig 23 B. Palpation and percussion had to be performed very lightly on account of the pain.

Believing this to be a case of faecal accumulation in the Coecum, ascending and transverse colon with inflammatory symptoms supeceding, I ordered 1 gr opium pill to be given every four hours.
I gave a large enema of warm olive oil - about 2 pints being injected.

I saw the patient several times during the day - there was very little improvement in the symptoms.

At 3 p.m. I gave a large enema of soap and water. Continued the pills and applied warm fomentations to the right side.

The small quantities of liquid she was allowed to take, seemed to aggravate the retching. These were stopped for the night.

May 23rd. Temp 101° F. pulse 120 fairly strong.
No motion and no flatus passed. Vomiting still in the night time, though not so frequent, pain still present, had no sleep and felt weaker.

Mr Cathcart saw the patient with me in the afternoon. After examination, he thought the condition was one of "Peritonitis in the right iliac region possibly associated with faecal accumulation in the Coecum and ascending colon, and probably due to ruptured Vermiform appendix."

He opened the abdomen the same afternoon in the right semi-lunar line Fig. 23 b. Clear fluid at first escaped; towards the Coecum it was opaque and some mucus lay in the Pelvis was quite turbid.
Records of Temperature, Pulse, Respiration, Stools and Urine from 22 Day of May 1894

In the case of Miss E. C. Aged 24 Occupation Milliner Result Recovery

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- 96°
- 95°
- 94°

- Normal Temperature of Body

- Independent Accounts

- Notes:
  - Weakness
  - Vomiting

- Pulse:
  - 130, 128, 122, 114, 108, 98, 86, 80, 76, 70

- Respiration:
  - 46, 48, 50, 52

- Stools:
  - 1, 1, 1

- Urine:
  - L

Steady recovery
The vermiform appendix was quite healthy, but some thickened and congested omentum lay over the ascending colon and was adherent to it, at one or two places. On careful examination it was seen that the wall of the colon at the points of adhesion was yellow, as if the seat of an ulcer, which had nearly perforated from within, towards the peritoneal coat.

These adhesions were not disturbed. Some maeutic glands were observed near the Iliocoecal valve.

The peritoneal cavity in the Pelvis and in the right Iliac region was carefully washed out with warm Boracic solution, and the abdominal wound was closed.

Mr Cathcart from the condition revealed by the operation believed the Peritonitis to have been due to the ulcers of the ascending colon - probably tubercular, therefore a tubercular Peritonitis - and that the adhesion of the omentum had fortunately limited the mischief.

In about 6 hours after the operation, the bowels moved. Two large motions came away at short intervals from each other, each of these
motions was twice as large as an ordinary motion, and very hard and dark.

From the day of the operation the patient made a good recovery, and was back to business at the end of June.

On the 2nd of July 1890 at 8 p.m. I was sent for, as Miss B.C. was very ill.

When I saw her, she informed me that she had overstretched herself during the day in trying to reach up to a box on a high shelf. Shortly after the occurrence severe pain set in.

Her temp was 100°.3 F. pulse 120. Tongue slightly coated with yellow fur. Bowels had moved that morning, but not for two days previous.

The abdomen was slightly swollen, and in the region of the old cicatrix and extending beyond it on both sides was a firm doughy mass. Pain most acute.

I injected $\frac{1}{2}$ gr. morphia hypodermically and ordered small quantities of milk and potash water.

July 3rd. Temp 101°.6 F. Pulse 160. Pain still acute, slight vomiting, but not faecal. The dull thickened area increased in size and the abdomen more swollen, see Fig 23 B. I ordered 1 gr opium
pill every four hours.

7.30 p.m. Temp 100.8° F. pulse 140 weak ordered small quantities of beef or chicken tea at short intervals, alternating with the milk and potash.

July 4th. 9.30 a.m. Temp 100°2F. pulse 124 slightly stronger. Pain easier Vomiting slightly but had been able to retain some of the chicken tea.

Slept very little. Abdomen slightly more swollen, tympanitic.

8.30 p.m. Temp 101°.3 F. pulse 130 not so strong as in the morning.

July 5th. Temp 102°. F. pulse 130 Passed a very bad night. Pain worse and vomiting worse. The mass larger, the abdomen very much swollen and tympanitic. Patient very much weaker.

In the absence of Mr Cathcart, Dr A.G.Millar saw the patient. He thought her dying but as a last resort he opened the abdomen in the line of the old cicatrix see Fig. 23 B. He found an extensive network of inflammatory adhesions. The cavities of the network being filled with broken down cascated material. The cavities were thoroughly washed out, and glass drainage tube left in for some time.
8 p.m. Temp 99°.3 F. pulse 128 stronger. Pain easier and no vomiting.


From this time her condition gradually improved and she was able to resume her duties.

In July 1891 an abscess developed at the base of the old cicatrix. This was evacuated and gradually closed up. In December 1891 the abscess returned Miss B.C. was placed in Ward 18 under the care of Mr Millar. He opened the abscess and scraped out some cascated glands. By the middle of February 1892 the patient was quite well again. She has had no recurrence of the symptoms since that time. She is regular in her bowels, is able for a long day's work, and has increased in weight by 20 lbs.

Photograph produced taken at the present time 1894.
Remarks on Appendicitis.

Cases 18, 19, 20, 21, 22, and 23.

A study of this group is very interesting. It presents to the mind a number of conditions and symptoms very like each other.

The small area which forms the soil for these changes contains the Coecum and appendix with their coverings and surrounding cellular structures.

Different terms have been applied to the inflammatory states of these parts, e.g. Perityphlitis when the cellular tissue around the Coecum is affected; Typhlitis when the Coecum alone is affected; Appendicitis when the appendix is affected.

Inflammatory affection of these three parts have formed the battle ground for a considerable amount of discussion. The most recent combatants in the field being Talaman and Treves.

Talaman depons the Coecum from the role which tradition attributes to it in the production of the symptoms described under the name of typhlitis.

Appendicitis p. 22.

Treves uses the term typhlitis, and appendicitis.

I have no intention of going into the merits or de-
demerits of these terms. The cases in this group will be seen to bear out, in their entirety neither the statements of the one nor the other.

In cases 18, 19, 22 and 23 where we operated we were able to arrive at a better appreciation of the symptoms, and were in a position to verify our previous diagnosis. Let us take the facts upon which we built our conclusions.

1st. The previous history. Cases 18, 19 and 22 present a good family and personal history. In that of case 23 we have a death from phthisis, and a history of the patient's strength going down for two years previously.

Constipation was present in all except case 19. So far very little could be gained from the previous history.

2nd. The history of attack.

In cases 18 and 19 the attack came on suddenly. The former was seen 24 hours, the latter 9 hours after onset.

In Cases 22 and 23 there was a gradual onset, the patients suffering from "chills" possibly rigors for a day or two before the sudden acute pains set in.

Case 23 was seen 20 hours and Case 22, 48 hours after onset of pain. We have thus a period of 3 to
4 days in the last two cases, during which the inflammatory condition was going on and which accounted for the comparative diffuse thickening felt on examining the abdomen.

3rd. The Position of Pain. The initial pain was referred to the epigastrium, then became localised in the right iliac region in cases 18 and 19.

In Cases 22 and 23 it was referred to the latter region alone. In neither of these cases, nor in those of 20 and 21 did the painful area correspond to the painful point of MacBurney.

4th. Vomiting. This followed the initial onset of pain in cases 18 and 19, but did not recur again. Vomiting lasted for several days in cases 22 and 23. Had cases 18 and 19 been left alone as in cases 22 and 23 vomiting might have repeated itself.

5th. Temperature and Pulse.

Cases 18, 19, 22, 23.

Temp. 99°.2F. 98° F. 99°.6F. 100°.F

Pulse 108, 72, 104, 128.

6th Physical Examination of Abdomen.

Having seen cases 18 and 19 so soon after the onset, I could feel with the palpating finger the enlarged and painful appendices surrounded by a small amount
of inflammatory thickening in the right iliac fossa at points shown on the diagram.

There was no reason for disappointment in not being able to do this in cases 22 and 23, for there was the strong possibility of the appendix being concealed by the inflammatory exudation which had taken place during the previous three days.

In these two cases also the Coecum and ascending colon were loaded with faeces.

After the operations we found our diagnosis right in cases 18 and 19, whilst in those of cases 22 and 23 we were wrong. In neither of these latter cases was the appendix affected.

For convenience of comparison no reference has been made to cases 20 and 21. Each had suffered previously from similar attacks. The present onset in both cases was sudden, and accompanied by acute pain. In case 20 the pain was located in the epigastrium, and then shortly afterwards fixed in the right iliac region, at the point shown in the diagram. In case 21 it was referred from the outset to the iliac region.

Vomiting was absent in both cases. The temperature and pulse were as follows
Case 20     21.
Temp 100° F.  99° F.
Pulse 90      89.

Physical Examination. In both cases there was a thickened resistance in the iliac region, with a nodular mass at the lower part. Each mass was painful on pressure. The location of the nodular mass was nearly the same.

In case 21 the abdominal wall over the caecal region was very flat and retracted. The corresponding area in case 20 was full and rounded. Movement of the abdomen in the latter case produced pain.

After the oil enemata had acted in case 21 there was complete relief from abdominal pain, and pressure over the resistant area produced very little discomfort. Such however was not so, in case 20. Even although this patient was under the influence of opium, the pain still remained.

Case 21 therefore appeared to be one of recurrent appendicitis, where the symptoms on this occasion, were due to impacted faeces in the Coecum.
Concluding Remarks.

On reading over the preceding cases one cannot fail to be impressed with the great similarity of the symptoms, the suddenness of the onset, and the successful termination of them all except three.

In all the cases the Diagnosis was correct save in Case 17. That a fatal issue would have taken place in all the cases operated on, had an operation not been resorted to, is assuming too much, but the strong impression made upon my mind was that the surgeon should not be called upon merely to operate.

Where the symptoms are serious, and where there is a strong presumption that an operation may be required the surgeon is all the better prepared for it, when the proper time has arrived, if he has had an early personal acquaintance with the progress of the case.

But what indications are we to look for as a guide to the proper time?

In the Asclepiad for 1889 Dr. B.W. Richardson raised the question of when to operate in Intestinal Obstruction, in a very interesting paper, which was followed by a no less interesting discussion. He sums up his argument in three statements:—page 113

"In all cases of acute intestinal obstruction the use of minor measures, such as purgatives, enemata, galvanic irritation, and massage, are, when judiciously used, correct up to the point of the appearance of
one symptom, namely, vomiting of matter of a distinctly faecal character.

2. So soon as this symptom is established there should be no hesitation in opening the abdomen for the exploration of the obstruction and the attempt at removing it."

The sum and substance of the first and second statement is that the onset of faecal vomiting alone is the indication for operation.

We saw that in Case 15 there was no vomiting at all. This patient’s first symptoms set in on the 23rd, and he was operated upon on the 25th. From the condition in which we found the intestine, I am of opinion that if we had operated, before the patient had fallen into the state of collapse in which he was, recovery would have taken place.

We have another example in Case 14. Here waiting for faecal vomiting would have been disastrous. The "minor measures" had no effect in giving relief to the patient.

It is difficult to say when faecal vomiting would have set in in his case, but destruction of the strangulated part of the bowel would certainly have occurred.

3. Obscurity of diagnosis in regard to the seat and nature of the obstruction ought not, in the presence of this special symptom, to prevent the resort to surgical interference; and for the following plain reasons:--

A. That sometimes what is inferred to be a complic-
ated obstruction turns out to be an extremely simple one.

B. That if the obstruction be complicate it may admit of being relieved without any further serious danger to the patient than would accrue from omitting the operation, since the greater the difficulty the more urgent is the demand for interference, and the more certain the death if surgical aid be not afforded."

It was for these very two reasons that I would suggest the early attendance of the surgeon without waiting for the faecal vomiting.

In connection with the treatment of acute appendicitis authors differ.

Talamm - Appendicitis p. 210 - gives three classes of opinions on the question.

1st. "The old idea, that of temporising to excess, only wishing to interfere when the abscess burst so to speak, under the skin and before the eyes."

2nd. Those who would open the abdomen and remove the Appendix as soon as appendicitis is made out; and for the following reasons:-

A. An appendix may rupture within the first twenty-four to forty-eight hours.

B. Many cases have proved fatal during the same period.

C. Some have died, where a too long delayed operation has not prevented a fatal issue, and which would have been prevented by an earlier operation.

D. Immediate intervention is without risk and gives
excellent results. Talamm does not consider any or all of these reasons conclusive.

3rd. The middle course which counsels early intervention but in reason. "Should not fix a date."

Immediate laparotomy should be performed in rapidly acute forms with general peritonitis. These where the peritonitis is circumscribed should wait." According to Treves, Typhilites p. 35; - "Surgical interference before the fifth day should not be undertaken, except in the presence of very complete symptoms."

Cases 18 and 19 are two good illustrations of how futile it is to lay down any hard and fast line of action.

In Case 18 the condition did not exhibit a general peritonitis, and yet at the operation the appendix was seen to be on the point of rupture.

Case 19 on the other hand showed a rapid development of fever symptoms, with corresponding rapid spreading of the inflammatory area. At the operation the appendix was not so far gone as in Case 18 but it is almost certain it would have ruptured in less than five days.

I hope the preceding cases have made evident the relationship which ought to exist between physician and surgeon.

As soon as a case presented itself, which indicated symptoms of an abdominal nature, I made strict inquiries into the personal and family history of the
patient.

First I examined all the systems carefully, noting any points of interest bearing on the system affected. If the patient was a female I made strict inquiry into the condition of the uterus, ovaries, and Fallopian tubes.

I then examined the abdominal organs carefully, eliminating those I found apparently healthy from those apparently affected. Rectal examination was never omitted. I then relieved the patient's condition as well as I could, watched the case carefully, and noted at short intervals the changes which might set in.

At a very early period of the case, I discussed all the points with a surgeon. The result of this method has proved very satisfactory as shown by the very few fatal cases.

We must not, however, lose sight of the fact that the necessity of bringing in a consultant, has its alarming aspects and might produce an undue amount of excitement in the patient, and anxiety to the friends. But these are more than counter balanced by the ultimate good attained.

At those anxious moments personal feeling or interest should stand aside. The life of a patient may be at stake, and one false step on the part of the physician in attendance might destroy it. There is not now the great danger that previously existed in opening into the abdomen; antiseptic methods have
brought the operation almost within the sphere of perfect safety.

James Smith