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On

The Diagnosis of Fallopian tube disease with illustrative cases and notes on the operation of Salpingo-oophorectomy

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"Testa a Leite"

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30 APR. 90
In selecting for the subject of my graduation these the Fallopian Ophthalmitis, I have had regard to the fact that in no work with which I am familiar is there any but the scantiest account of the symptomatology of this class of affections which recent researches have shown to be much more common than was believed, which call for operative interference perhaps more frequently than any other class of affection, but with a surgeons' practical difficulty in understanding to formulate into description from the various features to be observed in the clinical aspect of these diseases I am compelled to admit the difficulty of arranging the material at my command in any very definite order. The description which follows, such as it is, is entirely the result of my own practical observation of cases which have occurred in my practice and therefore I have deemed best to first describe the symptoms generally and then give the history of illustrative cases together.

Disease in the Fallopian tubes rarely exists alone, it is nearly always associated with a chronic affection of the adjacent ovary. The precise relationship is difficult to determine. Which is the primary condition. In a case of acute pelvic peritonitis, there before anything occurring after menstruation it is critical not different from the fact that the Fallopian tubes with all organs in the pelvis are sure.
Participate in the inflammatory process. Further in these cases, where a septic or specific vagrant spreads through the uterine lumina and indirectly affects the peritoneal tissue covering of the uterus and tube, it is not difficult to suppose that the gonococci find a passage into the Fallopian tube and thus set up a similar catarrhal inflammation to that which has previously occurred in the vagina.

In cases of tuberculous origin however a different aspect presents itself. In these cases you may have any of the forms of Fallopian tube disease and associated with it is common to find tuberculous cysts in the ovarian tissue. The appearance usually presented by Fallopian tube in the early stage of inflammation caused by other cause these infection through the uterine cavity or in the course of peritonitis is that of a follow. The whole tube is lengthened tortuous thickened throughout its length pale in color and not firm. It may or may not be adherent to the broad ligament. The opening the tube the canal is constricted large the mucous coat fibrils frizzle and covered with whiteish or pusulent secretion. The muscular coat greatly hypertrophied and whilst the tuberculous and peritoneal coats are more than proportionally
The canal is usually patent at the uterine orifice but blocked at the fundus end though often it is found stilled or to be part of the ovary and a communication with a cyst or small abscess cavity.

In later stages, or rather where the obstruction of the exit secreted fluid has been entered the tube becomes more and more distended filled up with it becomes the shape of either of a meningo-globular cystic tumor or a tortuous sausage shaped bag.

In one case in which I had the opportunity to remove the abdomen once for removal of an ovarian cyst and again later for the removal of a hydrosachinus observed at the time of first operation I noticed the following distinctions and differences of appearance. When first seen the cyst tube had a milky white colour was apparently consisted of at least three dilatation with intervening constriction and evidently contained a dense colorless fluid. When the tube was removed it had a bright red fluid while the colour was globular in texture and much larger than when first seen contained a dark brown fluid and had caused complete desiccation of the adjacent ovary by pressure that organ
which was at first healthy was in the end flattened spread out and a portion of the tube and consisted when extracted of nothing but some fibres tissue and a few very small sae or cysts. In another case in which the wall of the tube or cyst covering in the first instance was fairly thick tough and elastic at the time of removal it was thin to a degree seemed to consist of little but peritoneum. In another case in which I removed the ovaries together from a patient suffering from double hydrocele. The tube on the left side was a large torsion bag containing ten ounces of pus. The cavity consisting of three pockets connected with each other by a opening large enough to admit a forceps and being separated by a constant thick relatively constructed portion of the tube the coat was very thick more than an eighth of an inch everywhere were hard and tough. On the right side the tube was in a similar condition though evidently in an earlier stage. The coats were thickened the tubes torsion the contract persistent and on both sides the ovaries were distinctly cystic. In another case one of Hydrocele cyste the tube was enlarged to the size of a child.
head the coats were extremely thin the column bright and the remainder of the puncture it extremely were closely connected with what had been the way but which at the time of removal consisted of a thin shell of fibrous tissue enclosing an abscess cavity filled with their fluid pus.

The first case was presumably of specific origin. The second was undoubtedly tubercular. The third had no history which threw any light upon its cause.

There attended to these cases were nearly to give force to my previous statement namely that Fallopian tube ulcer is usually consistent with disease of ovary. A woman who is affected with this disease in any of its forms has a cut present. A certain series of symptoms which should nearly always lead one to a correct diagnosis.

I will touch only on the possibility of making an early and accurate diagnosis. Of these conditions as I know that syphilitics generally are induced to neglect on this question.

Just as all there is a condition of face which is very noticeable. We all know this characteristic expression of countenance the observed in ovarian tumors or other advanced disease of ovary. The face is
Utensil is also familiar. In Calpurnia there is a countenance somewhat similar to the face, ovular but yet different from it in the following - It is more drawn, it is not so greyish color, it has more the expression of constant suffering. When the tone of voice in speaking is one of weariness the whole aspect of the patient may be described as one of suffering fatigue. On inquiry one finds Complaint of severe pain low down in one or other of both sides. This pain become very greatly aggravated on exertion specially on lifting any weight or on standing. It grows very much worse at the approach of the catamenia and at the menstrual period the pain is almost unbearable. With a peculiar tearing ripping characteristic at these times and lasts throughout the whole period becoming a dull heavy aching pain only about two days after the cessation of the period.

The menstruation is not only painful however, it is markedly irregular, the periods come sometimes a day too soon, sometimes a day or two too late sometimes they are not more frequent than
normal sometimes they are so profuse as to be almost amount to flooding. In other cases menstruation is painful but ceases. The general tendency is however nearly always inclined towards excess.

There is no possibility of subsiding Sexual Connection. Any attempt are attended by very annoying pain and often vomiting. The general health is low, the mental state is one of hypnosis or depression. The appetite is almost absent, sleep is fitful and the bowels are irregular. Generally more or less constipated. Moreover at the menstrual period, sometimes or at odd intervals there occur remarkable attacks, feverish, attended by great aggravation of pain and dyspepsia, followed by a discharge of fluid from the vagina. These attacks of inflammation are unassociated with any exposure to cold "injury" or other factor likely to produce an attack of peritonitis. During the attack the patient becomes hot the extremities cold the abdomen swollen. Tender to the touch. The pain is one sides very acute and often there is an irritating diarrhoea. After the attack the patient often influences herself as feeling much better.
than she had done for weeks before.
The patient may or may not be aware of the be aware she is, alone.
A common history is that she has had one child that she had severe influenza afterward. She never been well since.

On examining a patient suffering from calf's pleurisy in the early stages there is not very much to be made out beyond the fact that the tube which in the normal condition cannot be felt can be made out running across the vaginal vault as a tortuous thickened cord. It can be traced to the ovaries (particularly if the rectal method be used) which in many cases is often hypertrophied enlarged and tender. The bladder is often induced to move displaced to one or other side. In one case occurring in a tuberculous female the feeling indicated the tube occurring to act as a cord pulling it up.

The sensation communicated to the examining finger by the Fallopian tube felt through the vaginal vault is not stimulated by any other decided condition. It resembles closely the congested and swollen urethra felt through the anterior vaginal wall during labor.
It is tender and very painful. Presence produces a feeling of nausea, and with the tympanum method if there be ovarian disease as well. The characteristic distending pain is produced. If the patient be now anaesthetised without which a thorough tympanum in this condition is not possible, one can make out distinctly the two broad ligaments, with the thickened midline elastic Fallopian tube, running diagonally outward from the uterus across the vaginal roof to the ovaries generally more or less enlarged, and as a rule an absence of cellular deposit. The tube will be found very often fixed in the whole or part of its course the ovaries if palpated will be found as before.

The following case was under my observation for nearly three years and owing to the unwillingness of the patient to undergo operation I was able to clearly trace the progress of the disease.

Mrs. B., a lady thirty-one years of age, in comfortable circumstances, first seen in October 1866 in the autumn of 75 whilst menstruating she took a long walk of a very wet and chilled. The result was a bad attack of pelvic cellular oedema, which laid her up for several weeks. The patient is a delicate looking blonde; her mother and one sister died of rheumatism, and her brother living has old consolidation.
in one after. He has been under my care for two attacks of Pneumocystis since, and he was obliged to go to New Zealand on account of his health, which was rapidly failing. After recovering from the initial attack of Rubeus, inflammation, the patient suffered for the first time from dysentery, and this growing worse, the surgeon was consulted a Leukenian of Glasgow. Whilst on his couch the day, he was some instrument which gave him intense pain and made him feel very faint. He was hardly able to set home and the surgeon was another attack of inflammation. Ever since this time he has suffered from such severe dysentery that she is entirely laid up at these times, and during the interval the slightest emotion is sufficient to precipitate an inflammatory attack. Have had several opportunities of seeing the patient during these attacks, and there is no doubt that they were true attacks of pelvis peritonitis, limited chiefly to the left side.

On making a thorough examination, instead of the following conditions: uterus anteverted and bodily lower in the pelvis, there normal masses of fecal matter deposit in each broad ligament. On the left side fell through the peritoneum a tender elastic cord-like body
meaning outward to the ovary which was somewhat enlarged.

The treatment employed consisted in means calculated to relieve the pelvic congestion and to promote absorption of the deposits with rest, saline hot douches, six per cent. puffs and counter irritation a very marked improvement in the general condition resulted.

After two or three months, the patient was enabled to wear a soft rubber cup shaped periament (gloves) which by elevating the uterus and appendixes, came in considerable relief and enabled her to go about without further assistance.

This improvement was maintained for some time. The menstrual periods, though painful were not as disagreeing as formerly and the inflammatory attacks were less frequent. Early in 88 the old condition quiesced in the ovary. With the appearance of all the old symptoms, the dyspareunia grew worse and the feverish attacks more pronounced.

On examining the affected tube I found it considerably enlarged, elastic and fluctuating. The ovary attached bit and much ecchymosis.

I punctured the tube with a hypodermic needle and removed a small quantity of dark brownish semen containing much meconium.
the conceded cholesteremic univexous corpuscles and dumb-bell crystal, granules of lime. The old uterine acid test showed albumin.

I urged the patient to submit to removal of the diseased organs both was unable to get her to consent.

The tube continued to increase in size and when last examined it had become an oval cyst as large as an orange and the corresponding organ on the opposite side was also participating in the disease.

Here we have an example of a case of salpingitis originating in an attack of peritonitis occurring in a strumous subject.

At the first examination I was able to make a diagnosis on the facts of the clinical complications and the comparative early development of the disease speaking pathologically. The majority of these cases run a very chronic course and remain quiescent for some time. Then suddenly from some cause probably blocking the better to patent orifice the tube becomes more or more adhered with fluid.

I have referred above the case where the affected tube seemed to act as a cord dragging the uterus out of place.

This was in a young lady 24 years of age who complained of great dysmenorrhea.
and inability to take any exertion whatever
without being laid up for a week afterwars.
The mother informed me that during
the menstrual periods the pain was so
severe that she lost all control of
herself and rolled about the floor in
agony. Under anaesthe sia I examined
carefully and made out the following:
Squamous membrane intact, cigars
small. Ulus, normally situated. But
fundus dragged over to the right.
Running across vaginal roof a tender
cord like body which was fixed tided
of the pelvis and was firm and tense.
Immediately below this was the ovary.
Significantly larger than normal not adherent.
I made a diagnosis of tubal disease but
hesitated recommending operation till
further observation had confirmed my
opinion. After five or six months, after
peaceful treatment, with no local im-
provement I rechecked my suspicions, simply
confirmed and then recommended operation
putting before the parents all the facili-
ties in connection with it. They desired
to allow a further time to elapse before
consecrating to their care and at present
the matter is remainer. The young lady
is a member of a family who have undertaken
sterilisation tendencess. Two of the younger
member have been attended by me for
swollen glands in the neck. The child
died of tubercular meningitis, and an
elder sister is undoubtedly phthisical.
By patient met with a severe fall from
her horse when she was fifteen years old
from which accident she ill later dates.
These cases may be regarded as fairly
typical of two clinical varieties of pleurisy.
Other types are illustrated in the history
of cases in which I have removed the
appendages and which follow. But
before proceeding to illustrate any new
This manner I wish to collect together
as far as possible in a succinct form
the details which lead together from a
clinical picture totally distinct from
that witnessed in any other condition of which
I am aware.
1. The history of severe dyspnoea.
The pain lasting throughout the attacks.
2. Continual severe pain in one or both
sides, liable to exacerbation, sometimes
interfering with sleep and growing worse
under the approach of the weather.
3. The occurrence of repeated attacks,
of influenza without obvious cause.
4. Nervosity or neurosis.
5. Dyspnoea.
6. Mental and bodily depression.
7. Sterility.
8. The occurrence of renal gland discharges.
9.
9. History of injury or inflammation in a tubercular constitution
10. History of specific vaginitis, of septicaemia or other peritoneal peritonitis

Physical examination reveals a tender, thickened cord-like body running across vagina within or without uterus, ovarian disease & in late stages, a distinct cyst-like tumour of irregular or lobulated shape containing fluid which is either straw-coloured, yellow, brownish, blood-stained or purulent.

Add to these facts, a peculiar expression of face which they describe is very characteristic and one has a clinical picture absolutely distinctive.

The treatment required for diseased tubes can be expressed in few words. Remove them as soon as the diagnosis is sufficiently clear.

Certain objections have been raised to the removal of uterine appendages, especially in young women. That the induction of the menopause destroys sexual desire causes sterility may produce sterility and is not justifiable as it is a dangerous operation undertaken. Hence, a condition not absolutely dangerous to life - as indirect sterility the disease itself causes, that
and the operation does nothing to make matters worse. As regards sexual connection, I have been informed by patients, after operation that the marital function has been successfully performed before. I have no experience of the likelihood of incontinence supervening, but I do not see that it can be any drawback for a usually successful procedure if followed rarely by a calamity. Any other operation may even administration of aloes may be followed by disaster due to the operation being a dangerous one. Dr. Lawson Dait says that in proper hand the mortality is 2 per cent. I have not yet had a death, though it is true my experience is not very extended as far. At the same time, I do not see why the operation should be dangerous where properly and carefully carried out. At all events, the patient who suffers from well marked salpingitis is rendered unfit for any useful occupation, her life is a burden to herself and her friends, and usually she bails out with very poor prospect of future improvement and general state of ill-being.

The steps of the operation will be best described and illustrated by relate in full the following two cases in which it has been performed by me. The cases in this order...
the Clinical feature of the common kinds of salpingitis as commonly met with here together with what has already been said make up a fairly complete and accurate description.

The first case here related is one in which removed the ovary and tube, for evacuation from dysmenorrhea of uterus, and was told that the necessary to illustrate the effect of a straight, forward cure, the distinguished from the use frequent or different steps in a tube case.

In this the schoolmistress aged forty was married 1856 in consultation with Dr. Sudder on August 15th 1887. There was a history of persistent and unceasingly headache for more than eight years. The periods had been very intense, lasting fourteen days and necessitating rest in bed. The constant loss proved very exhausting and the patient complained that she was, therefore, unfitted for her occupations being laid up for two weeks out of every four and being unable to wake up for lost ground in the interval.

On examination the uterus was found normal in position but considerably enlarged and a cavity half inch. The enlargement in the bladder in outline with an irregularity toward the left corners. Laborious cough
beged over the tumour.

In order to ascertain if it were possible to remove the tumour by enucleation or excision, the uterine cavity was dilated by cannulae and the process being completed in about forty-eight hours on the 16th August the patient being anaesthetised, an excavation of the interior of the uterus was made, demonstrating the following conditions:

A large hard strand embedded in the anterior wall, extending up to the fundus and occupying the right side of the uterine body deeply situated and not presenting to the uterine cavity.

A second smaller strand, undilated and occupying the left side of the fundus also intramural. Adnexal exploration also revealed less solid tissue elsewhere.

On September 6th assisted by Dr. Siddles Lewis MacKellar removed the ovaries and tubes by laparotomy. The operation was extremely simple. The tumour was 2½ inches long. The left ovary was partly adherent to a Douglas' pouch but beyond this there was no difficulty. Both ovaries and tubes were removed close up to the uterus the cavity of the abdomen cleaned and the wound closed. The patient made an uneventful recovery, rapidly gained strength and weight and is now perfectly
well. For a time she had some little trouble from mental depression and
flushes induced by the sudden accession of the menopause.

Mrs. C. twice learned that she was pregnant,
three child born ten years ago.

On Nov. 18th, 1886 I perforated successfully
on the patient for removal of a ovarian
cyst of the left side. At the time of the
operation the Fallopian tube of the left
side was found to contain a distended yellow
fluid. The ovarian operation had
been however so difficult and prolonged
and the shock was so great that it
was decided that it remove the tube
there and then would involve too
great a risk and therefore it was not
undertaken with

In March, 1887 the patient complained
that the pain in the left side - the site of
the original tumor - was bad as before
its removal. Nothing seemed to give
relief. She began to suspect that the tubal
disease on the opposite side was the
cause of these reflex symptoms. There
were no symptoms directly referable
to the right side until April when the
tube began to increase in size and to
become painful.

On May 7th it was aspirated through
Douglas pouch and both ovaries of clear appearance. Fluid was removed.
The pain now on both sides continued and the cyst soon filled up and became larger than before.
In October the 8th it was found to occupy a considerable portion of the pelvic cavity, pushing the bladder to the opposite side and to be very tender. The patient said that she was just as bad as before the operation.

Advised removal of the diseased tube.

And on November 7th (the 1887) operated in presence of Dr. Lewis Dany and Buddle.

Removal of tubes. - Intestines adherent to abdominal wall released together and also adherent to the tube which they completely covered. Great difficulty was found in separating them, but at last the covering vault of intestine was lifted out and the tube exposed. It was closely adherent to the intestines, on an extensive surface.
The ovary was out of sight in the fold of the broad ligament and was not discovered until after its removal.
There was a good deal of ooze from the adherent surface. Some of the healing surface had to be touched with strong pereclonide of Jone. The pedicle was treated by chrom lignitine.
...with the tube being cut off close to the abdomen, the wound closed by silk suture. The tube contained twenty ounces of clear fluid, yellowish and cloudy, showing diminutive blood corpuscles.

The operation though prolonged was not followed by any shock - nothing was troublesome for the first two days. The stitches were removed on the 7th day when the wound was found perfectly healed.

On the twelfth day a collective quantity formed and discharged at the lower angle of the wound. The abscess was quite superficial; the tube passing only 3 1/2 inches reach.

The discharge continued for some time but the patient seemed well and was able to rise and go about suffering no inconvenience save an occasional attack of flatulence always relieved by drinking hot water.

On the 8th December the third first day after the operation there was a well-marked rise in the temperature rising to 107 degrees. On passing the tube it was found to travel directly backwards apparently into the abdominal cavity for four inches, introducing a sound into the bladder and another into the bladder and keeping...
a probe in the wound with his finger of the right hand in the vagina. I made out that the probe was in a sinus which terminated in a space in front of the uterus and to the right side.

Having slightly dilated the sinus, a drainage tube was introduced and the cavity frequently washed out with tepid carbolic water. Pro continued to keep for six weeks and during that time all the purulent, five or six numbers which had been used for the pedicle came away through the sinus.

At the first menstrual period occurring about six weeks after the operation a quantity of menstrual fluid escaped through the sinus. After the last of the ligatures came away, the sinus definitively healed.

The patient has remained well ever since. It is worthy of note that she continues to menstruate regularly through both ovaries, and tubes have been removed.

Mrs. St., aged 31, married seven years, three children last seven years ago at the seventh month.

All labours were severe and after the last the patient was laid up for several weeks with "inflammation" and has never been well since.

The complaint of constant pain in both sides and lower part of back which
is much aggravated by emotion and on standing for any length of time.

Pain on passing water and inability to endure sexual intercourse.

On examination the uterine is found to be enlarged and located lower down than normal and pushed to the left.

On the left side there is a globular tender semi-flexible swelling the size of a small mandarin orange fixed and immovable.

On the right side there is a similar swelling but smaller under anaesthesia it was made out that these swellings were the two prostates described in the recent histories and extending forwards and outwards from them in a tortuous course were the thickened areas of the fallopian tubes.

The patient was an aconemic forcible looking woman with strongly marked facies ovarica stating that she is quite helpless and unable to work at all. She appears very emaciated.

During the last three years, she has had treatment of various kinds without relief.

On the 26th November (1887) assisted by Dr. Lewis Scary made an examination.

In the urethra, anus, and perineum.

Examination the orifices both were found
considerably enlarged and quite deformed by Cystic Disease. They were adherent deep down in the pelvis and to the tube, which were thickened to the size of a colon and enlarged to the size of the middle finger. The ovaries and tubes were detached close up to the uterus, rent off the pedicle, dropped back and the wound closed.

On examining the tubes after the operation, they were found to be full of thick, clotted, pus. Recovery was rapid and the patient returned home in the country in about three weeks. Since then I have heard several times from her that she remains well and strong.

There was a case of tubo-ovarian disease originating in peritoneal adhesions; and followed by or attended by Cystic Disease of ovaries. The patient was aged 26. The patient had been under my observation for about two years. She was a widow in very destitute circumstances, and had one child seven years old. When first seen she suffered from chronic abdominal pain, the pain being fixed, fanned down into the body of the uterus; and at present after lengthy and treatment, the adhesions became some extent stretched and
allowed of the uterus being partially
removed from its bed and sustained
by a Hodge pessary which was worn
with comfort for some months.
In October 1887 three months after my
last visit the convulsions were again about
a new series of symptoms the most marked
of which was a constant severe pain in
the right side being often too bad as to
prevent sleep. On examination I found
a tender fluctuating swelling about the
size of an hen's egg in the right femur.
Relying on the measures proven of service
on the 7th December I punctured the cyst
and withdrew about 1 deciliter of dark
brownish albuminous fluid. Following
under the necessity for bed rest confined,
the cyst continued to increase in size and
was very painful. In fact the patient
had the appearance of all the symptoms
of progressive cachexia.
Early in 1888 she communicated to me
her wish to marry and expressed a wish
that something might be done to cure her.
After examining all the features and
finally Resorting to operating to the patient
her intended husband an operation was
decided upon. The gentleman who was
a very intelligent, well educated man
blessed me in case I found the patient.
on the opposite side healthy. To have them untouched as he was, best opinion for children & it was possible that by this means the patient could be still fertile.

On the 12th February 1887 assisted by Dr Lewis Gray removed the right tube and ovary. The tube was much thickened and as herent all around. It contained two masses of brownish fluid.

The ovary was spread out and the surface of the extended tube converted by thin sheets of tissue. The uterine tube was found to be extensively adherent both to the pelvic peritoneum, were separated from each other. The uterus, raised out of the pelvis and a wire suture passed through the muscular thème of the fundus and fastened to the lower edge of the wound.

The left ovary and tube were found to be healthy and were left untouched.

Recovery was uneventful. The patient was married at Heath and has remained in perfect health since. The suture took place between the fundus uteri and the lower edge of the parietal wound, the suture often in the adhesion became attenuated and the uterus gradually sank back to its normal position.
C. H., aged 29 married eight years. Husband a farmer, became began at 11 years regular from the first 28 day type lasting 80-114 days and intervals. Four children ages 7\%, 5\%, 2\%, and 12 months. One abortion at 9th month as other frequency. Last, all natural except the last which was very tedious. During the last pregnancy had pleurisy of the left side at the sixth month. Has never been well since last labor, always feels ill and suffers constantly from severe pain in left side and lower part of abdomen and severe headache. Menstruation is attended by severe pain lasting several days longer than formerly. The flow is always too profuse and sometimes amounts to 2 quarts, haemorrhage.

States that she is quite unable for work. Cannot endure sexual intercourse that her life is a burden. Her bowels are constipated and anæmic. Punished on account of [illegible] looking at the face and much depressed in mind.-

Treatment was carefully carried out for four months. Perfect rest; hot baths. Examination the heart was found enlarged. Carcin lacerated with satisfac- tion. Both ovaries just palpable swollen tender and both tubes clearly felt throughout their
Palliative treatment was carefully carried out for four months. Perfect rest but brushes. Oxygen pills. Saline opium. Bromide. During this interval, acidosis and cachexia of the periods. Saline applications to the cervix and uterus over the ovaries. When no improvement resulting and to the patient from husband being taken for something further to be done. Admired removal of the diseased organs.

The operation was performed on the 22nd April 1888 in presence of Dr. Lewis, Bay. Both ovaries and tubes were removed. The left ovary was globular and tense. A mass of cysts. The right ovary was enlarged. Since the normal size and contained many cysts, one as large as the cavity of a walnut shell full of dark serousous looking fluid resembling broken down blood clot. The wall of this cyst were lined by layers of fibrous. Both tubes were enlarged. Thickened and tortuous. It contained a large white serousous fluid. Recovery was terminated Dean the patient three months after the operation and hard by increased her. Instead of the miserable emaciated creature she had known she was a healthy looking, plump active and cheerful woman.
that the war, as well as she had ever been in her life.

Her 68 and so unmarried 6 years no children. She had indifferent health since marriage. Complains of feeling depressed and ill suffer constantly from backache and has much headache. A constant fixed pain on the left side of the abdomen and is unable to hold her urine for any length of time. On examination, the uterus found to be pushed downward and backwards by a tumour in front. The tumour is mobile, globular, smooth and fluctuates evenly all over. It moves apart from the uterus. A sound sounds bounces backward 2½ inches. A sound in the bladder can be felt by the fingers in the anterior portion of the clear of the tumour. Percussion dull. No abdominal resonance. Percussion dullness partial confined to left side from the lower left extending to middle line.

Operation on 30th April 1888. Present Dr. Davy Lewis. Decision to excite cyst. Paved the large pyosalpinx containing 40 ounces of dark colored fluid. There were nine parietal adhesions, and part of the cyst was adherent to intestine.
The ovary was enlarged and congestion was found to be completely desintegrated and felt firm. The ovarian tissue was reduced to a mere sheel forming the ovary wall. There was considerable difficulty in withdrawing the cyst as it had extended between the fold of the broad ligament and had a pedicle to the uterine ligament were passed in a chain which included the whole of the broad ligament and part of the uterine sacral fold and the tumor removed close to them.

The organs on the opposite side were found healthy and were left.

The walls of the ovaries on the right were so thin that it seemed on the point of rupture. Recovery was only interrupted by a slight attack of pelvic cellulitis caused by the patient. She was an anxious woman getting out of bed when the nurses back was turned.

Mrs. W. aged 26 married 4 years. Three children. First labor normal; the last two rapid. She has not been well since birth of last child three years ago.

Irritation perineal in May 1887. Patient expected pregnancy on account of varicose veins in the legs becoming more than usually prominent.
Menstruation continued regularly until July 8th. Ceased then until the end of August when there occurred sudden
nausea, haemorrhage with violent uterine
pains. These symptoms continued on
and off for five or six weeks, and on the
28th October a decomposed foetus about
the size of a billiard ball. On the 3rd
February 68 noticed enlargement of
pelvis again - on 27th April whilst out
walking was seized with a sudden very
violent tearing pain in the abdomen,
fell down in a faint and was confined
to bed for a week very ill. The abdomen
swelled and became tender - on being
recovered a similar attack occurred
the patient becoming collapsed and re-
learned to for several times.
First came under my notice on June 12th.
On examination made the following note:

Thick cool; no fever; on pain when at rest;
bladder enlarged from necessity consequent on
smallly lacerated cervix. On the left side of
pelvis in broad ligament a large hard
mass the size of a child's head, on the right
side a hard broad ligament tumour about
the size of a billiard ball. On the 3rd
February 68 noticed
very tender.

The sudden painful attack, accompanied by collapse must have been caused by pelvic haematocele. This was probably the result of tubo-ovarian disease.

The hard tumoury feel on the pelvis consist of furred blood congealed and in process of absorption. This was the conclusion I formed at the time.

With rest in bed and treatment the hard tumour, disappeared in a fortnight.

Both ovaries were then found to be enlarged, very tender and both Fallopian tubes enlarged and tortuous.

On July 10th removed the appendages in presence of Dr Lewis Batty.

Both ovaries were firmly adherent deep to the pelvis and difficult to get up.

The right ovary was the size of a small orange and consisted of a large firm blood clot. The left ovary was the size of a billiard ball and consisted of a thin walled sac containing blood stained serum.

Both tubes were adherent and were on removal found to be distended thickened tortuous filled with purulent serum.

Recovery was successful but patient suffers a good deal from mental depression.
since the operation.

Case (14) Mrs. 5. aged 26 year. - Married at 19, multipara full para. Present illness began 3 years ago. First symptoms pain in the left ovarian region. It became constant and grew steadily worse. It was worst at the menstrual epoch, and nauseating. The patient became weak and anaemic, pain was much increased on pressure and sexual cohabitation seemed to exacerbate. She was treated for anaemia for some time with little result.

Consulted me on March 25th 1888.

I found her intensely anaemic and almost too weak to move. There was great tenderness over the left ovary, on examining her vagina the left ovary was found to be enlarged and collapsed. Exquisitely tender to the slightest touch. The only characteristic symptom being pain. The tube adherent bit and stretching along the vaginal roof, was much enlarged and tender. After Carrying out treatment calculated to improve the general health for some months proceeded to remove the ovarian

in 26th July assisted by Do Lewis and Mr. D. The ovary was enlarged cystic and faintly adherent deep down in the pelvis. The tube was swollen, inflamed, pa...
right scrotal column between, and 
adjacent to, fine fibrous bands to the 
uterine sacral ligament. The organs on 
the opposite side were found healthy 
and were left in situ. Recovery 
was rapid and the patient gained 
feeling strength after the operation very 
suddenly. Since the operation I have seen the patient 
several times. On examining her 
about a month ago I found evidence 
of commencing disease on the other side.

Miss B. aged 21 the wife of a county 
contractor, married 3 years ago previous 
to never been well since her marriage 
complains of constant pain on the left 
side very severe and worse at the 
menstrual period. The monthly flow 
is profuse and lasts seven or eight days. 
Attempts at sexual intercourse are attended 
by very severe pain and nausea.

A rendered entirely unable to do heavy work and 
is in an invalid condition.

The uterus was normal in size partly retroverted.
A very tender tense swelling the 
size of a small orange was felt about 
the lateral fornix posterior on pressure a 
suckling pain. A swelling similar to 
this on the left lateral fornix felt on protrusion 
was defined. Both tubes, clearly felt.
Operation Sept. 26th 1888 in presence of Dr. Law and D'Arby. Incision 2½ inches long. Both ovaries and tubes removed close up to the uterus. Left ovary completely destroyed by Cystic degeneration. Sacs of the cysts were haemorrhagic and one of these was in close communication with the adherent and enlarged fallopian tube. Right ovary was adherent deep down in the pelvis and it and corresponding tube were found to be in a similar condition. The cysts were not in this case filled with blood.

Recovery was rapid and perfect and the patient returned to her home on the 11th October.

Case 10. Mr. F. Aged 25. Married 5 years,acooper. Present illness began three years ago. Meningitis occurred at each period. He lay in a very great reducing her brain automne condition. He suffered a good deal from an unusual train of uterine symptoms and for more than a year past has had a constant severe pain in the left ovarian region. During the last five months the secretions have occurred very fortnightly and have been so profuse as to almost exhaust her strength. Each period for the last three months,
The patient has been accompanied by very severe pain and acute disturbance of symptoms -

On the termination of the period there has been a profuse discharge of pus beginning in a greenish tinge for a day or two and followed by a subsidence of the pain and fever.

During the short interval between the periods the patient remains strong and somewhat but never loses the pain in her side.

Physical Condition: An emotional hysterical woman easily deflected or cheered.

Uterus enlarged pushed to the right out of reach and partly retroverted.

On the left side and posteriorly a tumour of irregular contour tense and tender and able to move in uterine; on the right side a smaller tender tumour swelling and in Douglas pouch behind the tenderness later a tender postcarded way.

The lateral tumour fluctuated to bimanual touch and were without doubt distended Fallopian tubes. With the prostatic seeker and these physical signs it was easy to make a diagnosis of double ectopic pregnancy.

Before the time for operating immediately before the expected menstrual period as by this means we gave the patient longer rest up her strength from the exhausting
consequent on the last period and we also
believed that the hysterectomy following
the operation would in this way be
attended by less disturbance.

The operation was performed on 12th Nov. 88
in presence of Dr. Lewis Day. A good deal
of vomiting occurred during anaesthesia.

On opening the abdomen a large
lobulated and tense tumour was felt
on the left side of the uterus. With some
difficulty this was separated from its
adhesions with some uterine ligaments
and cut off. The ovary was cystic and
adherent to the tumour. The cyst proved
the an enlarged Fallopian tube containing
4 oz. of sandable fluid. The coats of
the tube were very much thickened.

The muscular coat contained blood, was
in the uterine hypodermis. The opening
at the fimbriated extremity was closed and
adherent to the ovary. The uterine end was
patent sufficient to admit a finger pull
the right side the tube was in a
peculiar condition in an early stage of
development. It was as thick as in diameter
as a woman's thumb, very tender. All
the coats were thickened. The uterine end
being patent the contents were ½ ounce
of sandable fluid. The ovary on the side was
also cystic, dissected by Cystic Disease.
There was some difficulty experienced in obtaining a good pedicle on the right side and when at last the ligature was applied the pedicle seemed unpleasantly short. Two transfixion double loops and two circular ligatures were employed. There was troublesome hemorrhage from adhesions necessitating engalising with very hot water.

About the third day there were several unpleasant symptoms. Pain from flatulence and the bowels vomiting which had been rather troublesome from the first because of dark red or purple colons. Salines were freely given until the bowels acted when all the symptoms disappeared and recovery was speedy.

After the 10th day there was a sharp feverish attack with pain from flatulence subsiding after the expulsion of several sound waves from the intestines. This patient was home on Dec. 3rd.

When last saw her right month, after the operation she was well in health of good color both action and cheerful. She had pain in whatever and is rapidly gaining flesh.

The only trouble remains the a tendency to depression and hypertensive symptom but time.
These cases which represent the total number of completed cases in which I have performed this operation may serve to illustrate the facts stated upon which I have insisted namely that it is possible to make an early and accurate diagnosis of dyspepsia to the fact that the disease has a symptomatology not resembling any other disease met with in gynaecological practice and that it is usually associated with whatever cause arising disease in the ovaries.

I cannot complete this part of my subject without referring to one other case an incomplete one in which I was able to diagnose double pyosalpinx but in which matter were so far advanced that removal was impossible. The patient was a married lady of 43 years who had been married three years and her illness started with the premature onset of labour. She had been ill when I saw her in April of the present year for 18 months and had been treated by a local practitioner in Ashburton Canterbury. She for the whole of that time.

It should be mentioned that at the confinement a large portion of the placenta was left behind and discharged several days.
after delivering in a decomposed state. This is sufficient to establish a definite origin for the mischief. There was a strong family predisposition to uterine disease when I saw her both lungs were externally involved.

The symptoms of chronic blood poisoning—lethargy, fever, chill, weakness, complained of great pain in both the joints. On examination, all the pelvic organs were united together and fixed. Still it was possible to ascertain the existence of a large fluctuation near on each side of the uterus, and connected with the broad ligament which could be only the Pyosalpinx. The patient was in the last degree of exhaustion. She was so feverish, weak as to be almost immovable.

At her urgent request I agreed to make an exploratory incision as possible. The tube—

On opening the abdomen the uterine was confirmed and it was found that both tubes and all the other organs were mostly united together by the resulting adhesion process from chronic suppurative peri toneum. The tubes cysts moreover were extremely fleshy and rotten. It was soon evident that any attempt at removal would fail more especially as the digital shock of opening
The abdomen had been opened too much for her. So I drew the tubes as near the middle line as possible and aspirated them, withdrawing from each about twelve ounces. Dickinson jeted pus and then endeavoured to unite them to the parietal peritoneum. This proved impossible to do properly as the tissues were too rotten to bear sutures and tore in every direction when the needle was passed. However, we united them as well as possible and passed a drainage tube to the bottom of each and a large glass tube to the bottom of the pelvic cavity.

After the operation she rallied more than was expected. We did not expect her to leave the table alive but the interior of the stomach seemed to have been renewed after the operation. The temperature fell the effect became very much improved and at the end of the 11th day I thought she would recover. However the next day becoming suddenly collapsed on opening the abdomen after death we found that in spite of every care in cleansing we had been unable to keep the pusulent secretion from finding its way through the rotten wall, and there was every evidence of supplicative peritonitis. An earlier interference would have convinced me before attended to in a more different aspect. Dr. Fiddle Lewis were
my assistant.

The operation has been so fully described in our recent literature that little need be said upon it. In cases such as the first I have described, where the organs were fairly healthy, there is no great difficulty.

In other cases it is very difficult. It requires the greatest care and patience in separating pelvic and other adhesions and often much contortions to obtain a decent pedicle. As a rule it is more difficult to remove a diseased tube Fallopian tube than to perform the most difficult operation. In my cases I have always gone in for complete antiseptic precautions with full suction detail. This may be probably superstition on my part as perfect cleanliness with especial care directed to sponges and instruments is doubtless all that is necessary. But I do not care to give up antiseptic at present. I never saw the least harm result from the spray and in those cases of which I have read where carbolic acid poisoning has followed its use I believe that the spray was either used too strong or that it was improperly directed. A spray of 1-100 directed across the abdomen right on to the wound can do as harm and be a preventative theme. The incision need not exceed 2½ inches.
in length. Nothing is gained by a longer incision as all the work of separating adhesions, spreading cuticle, lies in the done by touch alone and some to admit two fingers of the left hand is all that is required. Rather more care is required in opening the peritoneum than in ordinary orastomy as the intestines lie immediately beneath it and may be wounded. The plan that I have adopted is to go right down to the peritoneum with one sweep of the knife then to arrest all bleeding by pressure from two and, if necessary, ligature any bleeding point with fine silk. Then divide the peritoneum along an Adams' edge and make a hood in the supraventricular vessels to that enlarge the opening to the requisite length.

In opening the abdomen, a common difficulty is experienced in oriental adhesions. This is often confusing and leads frequently to troublesome haemorrhage. In separating deep adhesions, one has to bear in mind the close proximity of the large pelvic veins which may be torn through if too much force be used. Have not made use of the Harfordshire knot recommended by the Hudson daily. Take the ordinary hemostatic ligature tying care that the two twines cross in the centre.
and first having just applied a single outer ligature to secure the fimbria if some places
of the pedicle be broad several transection, may be necessary. These should form a
chain and after removing the distal part a single vascular ligature should secure
the whole.
Before allowing the pedicle to drop into the abdomen they should be held for a little
time in pressure to prevent its tension against slipping of the ligature.

The material have used for pedicle ligature is No. 4 or No. 6 Chico twist. As a rule
the thickest ligature which will hold without cutting should be employed.

After removing the organs a most thorough
peritoneal toilet should be made.
The cavity must be cleansed of every drop
of blood or other fluid, particular care
being paid to the ureter vesical space,
Douglas' pouch and the flanks.

Gauze pressure is usually sufficient
to arrest oozing from bleeding surfaces
but where it fails the injection of
water at a temperature of 105° F will
be effectual. Where the operation has
been prolonged there is much shock; this
often acts as a valuable stimulant
and an anesthetic spirit should be freely
given. By means of Clover, inhale any other
The after-treatment is simple and does not differ from that employed in other abdominal operations.

On the second or third day there is usually a retacostasis preceded by a good deal of pain and constitutional disturbance. I have found the use of sodium phosphate especially the sulphate of magnesium of great service in arresting the skipping vomiting and flatulence so usual after laparotomy. As soon as the bowels have passéd and the symptoms disappear, we may safely procure too nauseating a biliary powder will often answer equally well and if in a faeces ten grains of calomel laid after the supper will have the desired effect.

When the bowels vomiting continue beyond the second day there is reason to suspect the existence of peritonitis especially if at the same time the pulse and temperature continue to rise. When the vomiting matter assumes a tallowy colour it is generally regarded as a very grave sign. In the case described as Case 7 there was every indication of peritonitis, with this characteristic vomiting. Emetics were freely administered until the bowels acted when all the symptoms disappeared. The first evacuation was of precisely the same character as the latter which had
been previously mentioned. This material is blown out by the peritoneum absorbed by the intestines and then passing its way into the thoracic is expelled by vomiting. A constant circulation of the fluid becomes kept up all considered is impossible, and the patient suffers exhausted or from blood poisoning.

If the moment the blood vomiting begins, proceed due bounds keep strict check is given in the first doses; every hour until the bowel act this class of will cease to have any significance whatever.

Limited experience is now the here in favor of removing the appendages of to the other even where only one is involved. In the cases where left the healthy side it was done with a hope that the patient might bear children. In one case there is disease in the other tube. In the other, there is no evidence of that so far nothing has these followed pregnancy.

The mortality removal of the uterine appendages has been said by some writers the 7% or 8% per cent which Lawson Jex gave it as 2% per cent. Now there can be no doubt that the operation presents difficulties and dangers.
but successful issue in direct proportion to the duration of the disease. The disease can be diagnosed early and interference secured before the organ has contracted insurmountable adhesions through excessive inflammation acting to attack on before the lesion upon which one has relied for the formation of the pedicles have become disintegrated by pressure and contact with fetid pus the operation in proper hands should be attended with quite a minimum of fatal results. In my remarks on the early diagnosis of salpingitis I have not made any allusion to excluding other conditions. In the first place and speaking generally I regard diagnosis by echoscopy as an imperfect and insufficient method entirely. In cases of this sort as other methods than the direct operation will hold.

When it is admitted that the Fallopian tube cannot be or can only very imperfectly be made out in the normal state or in the cadaver the fact of feeling them at all should be almost sufficient to make one cognizant of the existence of salpingitis in one of its forms, and the results of physical examination (especially in menstruation) being summed up and
added to the very striking history which
the case presents, will togethet form an
overwhelming chain of evidence and
under the diagnosis accurate and
detached.

It is not always easy to differentiate
the different forms of tubal disease one from
the other. In cases, such as those
related for (i) and (ii) the symptoms
so clearly point to infarction that
error is impossible. But in cases, where
the process of infarction is very limited
and the symptoms are overshadowed by
constant ovarian disease, such as
have occurred in case (ii) it is not possible
to say in what state the tube will be
found on section after removal.

Fortunately, it matters little but the following
may be accepted as the rule which admits
of doubt of many exceptions, but is still
sufficiently accurate in practical
purpose. (i) Tubal disease in persons
with Polytrophic tendency will assume
a suppurative form from whatever cause
arising.

(ii) Tubal disease originating with or following
peritonitis in a non-stenous person will
probably take a catarrhal form simply.

(iii) Tubal disease connected with cystitis
or other disintegrating ovarian disease with
probably takes the form of Hydrocele.

Hæmatosalping is a condition with which up to the present I have no personal experience. I will be nearly certain on that any of the forms of salpingitis may be complicated by haemorrhage occurring into the lard and that we can readily imagine haemorrhage occurring in a cataractal tube in a cataractal condition becoming eventually a hydrosalpinx.

The diagnosis of this case in the Fallopian tubes in an early stage has been already sufficiently indicated and I have endeavoured to point out as far as possible the main features of distinction between different varieties.

There remains now to be considered the diagnosis of a later stage of development. In this as in an earlier stage an accurate history is all important. The history obtained varies little from that found in an earlier stage save that as might be expected some of the features are more strongly marked. The characteristic symptoms having existed for a considerable time are more significant and decided. The facial expression is more pronounced. The general health is in a more deficient and debilitated state in early cases.

The patient too may assume again which if not characteristic is at all events worthy notice. In many instances the patient has been described as a half doubled up appearance and often a decided leaping of the face. Of course upon the precise situation of the pain. At the risk of repeating myself allow me to say that a constant
and localised pain with frequent inflammatory attacks, independent of obvious cause, are in themselves highly suggestive of tubo-salpingitis. Besides the accumulation of a greater amount of fluid in the history there is now more direct and positive information to be derived from physical examination than in the early stage. A cyst or irregularly shaped tumour is often felt and the bimanual examination, to the finger an accurate idea of its shape, dimension, consistency and connexion with surrounding parts. In a well marked case the tumour is often almost horseshoe shape, with contraction, the clearly felt here and there in its length, it is firm, fluctuating movable and unlike any other tumour met with in the pelvis. There is a very distinct difference independent of shape between the feel of a tubo-salpingitis and an early ovarian cyst which however depends so much on experienced sensation as to be beyond the power of words to describe. The surgical finger in gynaecology may gather many important facts which are incapable of expression in words. I cannot imagine the likelihood of a tubo-salpingitis being mistaken for an ovarian cyst at any stage of development - the history in the two cases is so entirely different.

The bouncy elastic feel of a pelvic inflammatory exudation is in itself sufficient characteristic to prevent error. It must be admitted however that physical examination alone will fail to
distinguish between a very advanced case of Pyosalpinx and an abscess in both broad ligaments, pushing its way upward. These two cases of Pyosalpinx were not well developed. But although the history would be sufficiently distinctive in either case, I have treated several cases of pelvic suppuration and have not met with one instance having a history in any way resembling that of Pyosalpinx. A Globular Hydatid, when large and thick-walled, might without a good history be readily mistaken for an ovarian Cyst. The latter is, however, usually painless and is not accompanied by the characteristic symptoms of pyosalpinx. In Pyosalpinx, the existence of severe dysmenorrhea with the pain lasting throughout the period is very significant and is not observed in Pelvic Cyst.

One of the conditions most resembling a large Pyosalpinx is a suppurating hematocele especially if the hematocele has taken place into the folds of one or another broad ligament. Pyosalpinx may be complicated by hematocele but in true hematocele there is a history which is unmistakable.

In plain and straightforward cases of pyosalpinx, the shape and consistence of the tumor are sufficiently characteristic. The irregularly lobulated contour is simulated by no other condition.

I do not attach much importance to the examination of fluids, though it may be an aid.
in difficult cases.

The darkness brown color common in Sylvester's
secular, long-standing the presence of albumen and
frequent blood cells. The absence of dyspepsia
essentially epithelial cell, and paresis.

I do not believe in tapping acting as a
curative procedure in any form of tuberculosis,
though on the other hand I do not see that a
tapping, whether for purposes of diagnosis,
or otherwise can do the least harm.

Further, tapping independent of determination
of fluid, may aid diagnosis for the collapse
walls of the tube assume when emptied the
irregular thickened cord-like shape characteristic
of the early stages of the disease. When the cyst
refill, if carefully watched - it will be
found to assume at first an elongated bag-
like shape. Thus, though puncture cannot
be undertaken as necessary for diagnosis in the
great majority of cases, may be indicated for treatment
in some cases and diagnosis and may be
useful in giving the patient temporary relief
from harmful pressure symptoms and in gaining
some small bit of her strength. In cases where there
punctured small tubular cysts, have used a
hypodermic needle with an ordinary syringe.

In one case in which I emptied
a large cyst I used the smallest bore
of a tonsil aspirator.

There remains nothing now but to come up
finally those facts and features which taken together are in my opinion distinctive and diagnostic of disease in the Fallopian tube.

In an early stage

I. Constant fixed pain in one or both lower fossae liable to exacerbations.
II. Dysmenorrhea, very severe and lasting throughout the period.
III. Irregular generally too profuse menstruation.
IV. Recurrent febrile attacks, with pelvic pain without obvious cause.
V. Periodic discharge of pus or other fluid subsequent to one of these attacks.

In a later stage.

I. General increase of all the symptoms.
II. Symptoms pointing to septicaemia, shock.
III. Fever and purulent discharge (Pyosalpinx).
IV. Marked and peculiar expression.
V. The existence of a distinct tumor or tumors in the region of the broad ligaments, of a characteristic moccular or globular shape.

The results obtained from the chemical and microscopic examination of fluids.

The history of a predisposing cause to Constitution in all cases. Here especially the Tubercular constitution, septic infection during the pregnancy.
Specific defects or injury from facts and
the like.
These facts obtained in any given case
make up a perfectly characteristic and
remittable feature and should render
one, diagnosis of tubal disease accurate
and detailed in nearly all cases.