On the Diagnosis and Treatment of Ovarian Droopy.

Setting aside preliminaries, I enter at once upon the discussion of the subject, the title of which forms the heading of these sheets; trusting that the immaturity and inexperience of the writer may lean, for his remarks, a leaning to not over-critical regard on the part of the learned professor, under whose scrutiny they must pass.

1. Of the Diagnosis. Ever since the time that Ovarian Droopy began to be studied upon the living subject, its diagnosis has been acknowledged to be fraught with perplexing...
difficulties; and even at the present time, we find it difficult, in many cases, to pronounce with certainty upon the existence of the disease in question. In reference to this point, Dr. Hamilton says, "It is extremely difficult to distinguish enlargement of the ovary in its early stages." "If, even after a certain advance in its progress, it is with great difficulty distinguished during life, instances of this affection are ever to remain
in which an uncertain or incorrect diagnosis happens in the hands of even the most accomplished obstetricians. The nature of the malady remains devoutful through life, it is only cleared up by post-mortem examination. And we are continually meeting with examples, in which the disease has been confounded with others, which simulate it in external characters. The diagnosis of ovarian dropsy has been so confounded, while in some instances, as to lead to operative interference, the result of which has been to show, that the nature of the affection has been mistaken. In more than one instance, the surgeon has opened the abdomen of a patient to look for a tumor, which,
to his ineradicable mortification, he had found to exist only in his expectations.

Out of 97 cases of Ovariotomy tabulated by Mr. Phillips, he instances the abdomen was laid open, and no tumour was found!—in 6 others, the tumour was not ovarian, but either uterine or omental. The records of Paracentesis afford equally convincing proof of the insufficiency & difficulty, which have characterised the diagnosis of ovarian cystic disease. Many a time, in attempting to puncture a presumed ovarian cyst, the Luminary of sagacious surgery has performed the creditable operation of “dry tapping.” Nevertheless, notwithstanding this liability & these mistakes, there can be no doubt that the diagnosis of ovarian disease has become, of late years, much more precise & satisfactory. The morbid conditions, with which the disease is liable to be confounded, have been more fully ascertained, & the modes of distinguishing between them, determined; if it is to be hoped that, ere long, we shall hear no more of surgery doomed to search amongst the intestines for tumours which never existed, & that the absurdity of “dry tapping” will no more be repeated.
With what diseases & mental conditions are we liable to confound ovarian disease?

1st.—It may be—has been—metastasis from peritoneal cavity—Morgagni. But other authors, recount cases in which ascites was cured by the loss of large quantities of water by the emetic. But it is more probable, as the Giff has remarked, that the effused fluid proceeds from ruptured ovarian cysts; for, if ascites was formerly cured by this spontaneous tapping at the breast, it would be cured in the same way, at the present day; but we never hear of such cure.

And further, Professor Asecnier has found, that in cases of peritoneal dropsy, when the tympanum of the breast has become filled with a fluid, the result is very unfavorable to the patient. He has tried the puncture in several cases, but in all, a fatal issue ensued; the patient dying sometimes from peritonitis, more frequently from exhaustion—The result of the constant drain upon the system. A constant discharge from an accumulating cavity, can be borne for a much longer period, than when it takes place from some natural cavity of the
body. In the latter case, it weakens very much
in the same way as repeated bleeding. From all
this it seems probable, that these cases of acute
ascites were rather instances of ovarian disease,
in which the cyst emptied itself by rupture
at the navel.

Still, ascites & ovarian disease, when in an
advanced stage, have several symptoms in
common, referable mainly to their mechanical
effects. Besides the enlarged & fluctuating abdomen,
there is dyspnoea, from the impeded play of the
diaphragm; anaemia & pains of the lower extremities,
from pressure on the ascending venous current;
progression, similar to that of a pregnant woman;
an enlarged & tortuous condition of the cutaneous
veins of the abdomen. etc.

In other signs, by which they reveal their presence,
the diseases differ materially. In true ascites,
we have the indications of constitutional suffering
& disturbance much more strongly pronounced:
death, emaciation, hollow complexion & present
themselves in the ascitical patient—easily accounted
for when we consider, that the morbid accumulation
is dependent upon disease of an organ, highly
important in the function of nutrition.
Further, as the replenishing of the blood is rarely interfered with, partly from the mechanical effects of the dropsical collection itself, but chiefly from the primary disease of which there is a result, the circulating fluid becomes impoverished to the point, hence the greater tendency to general anaesthesia in this affection, than in the ophthalmic enlargement of the eye. In the latter malady, the general health gives way much more slowly, the disease being situated in an organ not directly necessary to the life or well-being of the individual.

And in attempting to separate between acute ovarian dropsy, the most seek more definite distinctions, than are furnished by their general symptoms. As usual, in this, as in other points of differential diagnosis, physical investigation yields no sure or valuable tests. And, in estimating our physical examination, we pay attention to the shape of the abdomen — we manipulate the tumours — we listen to the sounds yielded by percussion.

With respect to the shape of the abdomen — in ovarian dropsy, the abdomen is frequently more protuberant at one part than another; there is the appearance of a defined tumour, enclosed by the abdominal wall, if the general swelling is increased, rather than
diminished, when the patient lies upon her back.

In this attitude, the enlargement is uniform, symmetrical, in reference to the two sides of the body. In the sitting posture, the belly becomes flatter, the flanks bulge out, from lateral pressure of the fluid.

In the commencement and progress of the internal drops, the enlargement of the abdomen is equal on both sides! whereas, in the early stages of the ovarian disease, the tumour occupies the lower part of one side of the abdomen, gradually extending from there, until it fills up, to a greater or less extent, the whole abdominal cavity.

We are aided in our diagnosis by manipulation of the tumour. In the case of ovarian disease, we discover the rounded, outline of a defined tumour, with limited fluctuation at dull percussion, perhaps fluctuation only at certain parts of the surface of the tumour.

In a case, there is no such solid enlargement & fluctuation is usually more general. But when the ovarian disease has come to occupy all the space room in the abdomen, it is distending the cavity greatly, these signs fail considerably. The bulging becomes more uniform; the fluctuation more distinct general. The definition of the tumour
less distinct, especially if there be some attendant peritoneal effusion. We must seek then, for some other diagnostic mark. This is furnished by 3rd percussion. As the disease very enlarges, it rises in front of the intestines, displacing them backwards up to the sides, if taking up a position close behind the anterior abdominal wall; hence, when the patient is laid on his back, we have dull percussion over the umbilical & hypogastric regions. But, if the abdominal distension be due to ascites, a tympanitic sound is produced by percussion in the region of the umbilicus; for the bowels float to the upper part of the liquid, & these give out their peculiar resonance. In ascites, the relative places of the liquid & of the intestines is determined by the posture of the patient. Hence, if the patient turn on his side, the upper part belongs nearest & the umbilical region dull; & by percussion we can follow all the various movements of the fluid. On the other hand, in ovarian disease, there is always a dull sound in front, no matter what position the patient may be in; if there be any resonance, we find it at the sides, & there it remains under every change of posture. These facts are well illustrated by what is observed to take place in those occasional
instances, where the contents of an ovarian cyst are suddenly diffused over the whole abdominal cavity, in consequence of rupture of the cyst wall. Whilst the fluid still formed part of the ovarian tumour, there was, as usual, dull percussion over the umbilical & hypogastric regions, with tympanitic resonance in the lumbar divisions. But when the fluid had been forced out of the cyst, or had been diffused through the general peritoneal cavity, the dull & the tympanitic sounds change places—the former being now found at the site to which past the fluid gravitates, & the latter being met with in the umbilical region, where the bowel was now floating.

We have, then, as a very certain diagnostic mark between ovarian disease & ascites—tympanitic resonance in the umbilical region, when the latter is present; but a dull, flat sound, if the enlargement be due to an ovarian tumour.

There are only two or three rare circumstances, which detract from the universal applicability of the test. We may enumerate them.

Under two conditions we may have a dull sound in the umbilical region, though the disease be nevertheless acute. First, when the abdomen is so
greatly distended by fluid, as to render it impos-
possible for the buoyant intestine to reach the surface.
It floats as high as the mesentery will allow, but
does not come in contact with the abdominal
wall; there is consequently a stratum of fluid
between the bowel & the parietes of the abdomen;
from this reason why percussion yields a dull flat
sound. Secondly, when the intestines are prevented
from rising, by the mechanical restraint of inflam-
matory adhesions or mental disease. The bowels
are tied down to the spine; the fluid accumulates
between them & the anterior wall of the abdomen;
the result is, that again we have dull percussion
with peritoneal dribble; and the amount of fluid
in this case, need not be great.

Dr. Watson gives a case of ascites, in which the
enormous distension was the cause of dull percussion.
It occurred in the hospital. In the patient who was the
subject of it, he, on a previous occasion, been success-
fully treated for peritoneal dribble, which presented
the usual physical signs of tympanitic resonance
in the umbilical & epigastrial regions, with dulness
in the flanks. Upon her second admission into the
wards, the laborate sufferer, a return of her complaint,
if the abdomen was so enormously distended, that there
was no room for flattening of the swelling, when she lay on her back. Fluctuation was also distinct, but then part of the belly yielded a dull sound on percussion. Subsequently, the woman died. Upon post-mortem examination, the bowel was found floating midway in the fluid, the presenting being too short to allow of its reaching the greatly projected abdominal wall.

There is a third exceptional case which should be borne in mind. It is just possible that an ovarian cyst may be present when the umbilical region sounds tympanitic. A case of this kind is recorded by D. Watson, in which, after the cyst had been emptied, a large quantity of a gummy, glutinous fluid, on tapping, the abdomen again began to enlarge, apparently from re-distension of the sac. But there was this anomaly in the case, that the umbilical region always yielded a tympanitic sound upon percussion. It was found after death, that within the cyst (which was of considerable magnitude & adhered to the peritoneum in front), gases had been generated, to such an extent as to distend its sacs — hence the hollow resonance. As in the case of uttering tympanites, the gaseous accumulation might be generated by the living.
membrane of the cyst, or perhaps more probable, it was the result of decomposition in the duct of the fluid which remained after the previous tapping. The exceptional cases which have been referred to are however so rare, that they serve rather to illustrate the rule of diagnosis than to detract from its practical value — it is well however, to bear them in mind.

In those cases in which ascites & eycystic dropsy co-exist, it is usually not difficult to ascertain the compound nature of the affection. The defined tumour may be felt by pressing above the superimposed stratum of fluid, & its outline may not unfrequently be distinguished. The tumour rises more or less free, in the cavity of the abdomen; it a space is perceived between it & the abdominal wall, this space is fluctuating, it varies in depth according to the posture of the patient.

This complication of cystic dropsy with ascites is by no means uncommon, though probably Portal was wrong in stating that ovarian tumours are always accompanied by Ascites. Generally however, they do determine an increased secretion of serum; which, if it does not run to excess, has no doubt a salutary influence, in lessening
the injurious effects which might otherwise be pro-
duced by the weight & pressure of the tumour upon
neighbouring viscera.

It is very questionable, however, that as Prof. Bennett
thought, the ascitic fluid usually is generated within
the cyst. In the majority of cases, it is more probably
the increased secretion from the peritoneum itself,
resultant upon the irritation produced by the tumour.
Still, Dr. Bennett has shown, that this at least
is not always the case. In one example of ovarian
tumour which he exhibited to the Medical-Chirurgical
Society, the fluid which had surrounded the tumour
must evidently, from the wrinkled aspect of the
cyst wall, have oozed in part at least, from the
interior of the sac. In another case, an ovarian
cyst presented an opening about the size of a
dime-piece, with a thickened round margin, through
which, no doubt, the secretion of the living cyst
had been emptied into the peritoneal cavity.

But this explanation can only apply to a few
cases; for the occurrence of ascitic effusion &
opening (ulcerated or otherwise) in the cyst wall,
are in no means proportionate to each other in
frequency. It may serve to account for the occasional
of very large accumulations of fluid, in connection
with small ovarian tumours.

Next, we have various states of the Uterus which are liable to be mistaken for enlargement of the Uterus:

1st. Retroversion & Retrolision. These displacements, which are same in fluids, differing only in degree, were supposed to be quite rare ten to twelve years ago, they were stated to occur sometimes when the Uterus was enlarged by pregnancy or disease, but little or nothing was said about their happening when the organ was in its ordinary unpregnated condition. But now that we have a ready mode of diagnosing the affection, this backward displacement is found to be very common, and there is no doubt that formerly it was constantly mistaken for tumours of the Ovary and Uterus--of the Uterus perhaps, most often.

The mistake would be all the more readily made if the Uterus were enlarged by pregnancy or disease, as well as displaced. We shall however diagnose readily between these affections, by ascertaining whether the cavity of the Uterus does or does not retain its normal direction. If the organ be retroverted, the sound passes right into the substance of the supposed ovarian tumour, and by turning
the instrument forward, we can remove the pelvis — we can, in fact, make and unmake the tumour at pleasure. If we find the uterus in its normal position, we at least determine that we have not to deal with Retroposition.

2. An enlarged state of the uterus, whether from fibrous growths in its parietes, or from pregnancy, is liable to be confounded with ovarian dropsy — chiefly in its second stage.

There are one or two diagnostic marks, which apply to the uterus in an enlarged state, whether this result from fibrous growths, be pregnancy, or morbid accumulation in its cavity. If the tumour under examination be uterine, percussion at the cervix, by a finger introduced into the vagina, will cause an impulse that will be transmitted to the other hand, placed externally on the abdomen, directly and at once, conveying the idea that the tumour, which we feel per vaginum and at the exterior is one and the same thing — the tumour moves as a single mass.

In the case of the ovarian enlargement, no such direct impulse is communicated to the hand, but a tap on the cervix; for there is an intervening flexible pedicle of attachment between the ovary and uterus, upon which the effect of the impulse is lost.
Further, as the uterus lies in front of the transverse ligament, when an ovarian tumour is present, it is pressed forward, and may be felt in front of the tumour, a little to either side according as the enlarged ovary is right or left; on the other hand, when it is the uterus itself which is enlarged, it is of course not felt of its normal size, in front of another tumour.

If pregnancy be present, our best guide is auscultation; there are sounds of the fetal heart accompanying it, which of course is absent in the ovarian tumour; but one source of fallacy requires to be guarded against. Several cases have occurred in which the ovarian tumour has, for some time, been thought to be gravid uterus, and the Medical attendant has even imagined he heard the fetal heart.

The mistake has arisen from the circumstance of the impulse of the maternal heart, being communicated, over the diaphragm, to the tumour.

Such an error would probably only be committed when the tumour is large enough to fill the abdominal cavity, and lie in contact with the diaphragm; and when also the mother's heart is beating with unequal rapidity. The rapidity of course would have to be very great, in order to equal that of the fetal heart; and the synchronism of the fetal and
maternal heart sounds, is a coincidence we need rarely look for. The part of the tumour in which the sound is heard loudest might also aid the diagnosis: for the mistake could only be made when the ovarian tumour has attained the size, which the uterus presents when the fetus takes up a definite and final position within its cavity. Then if the presentation be the usual one— that of the head—the sound will be heard loudest in one or other iliac fossa, if it proceeds from the fetal heart—but at the upper part of the tumour, if caused by the action of the maternal heart, unless indeed the child were presenting by its pelvic extremity. Still, if by arteriographic examination we are able not infrequently to make out twin pregnancies—if we can distinguish between and separate the beating of two fetal hearts—it is hardly likely, if we are alive to the possibility of a mistake, that we shall confound together the sounds of the maternal heart and those of the fetal organ. And if this fallacy be avoided the rapidly watch-like sounds of the fetal heart, infallibly denote the existence of pregnancy. At the end of the ninth month, the problem would necessarily be solved. The perplexities attendant upon the existence of ovarian droopy and pregnancy would
also be removed at that time.

What signs enable us to distinguish between an enlarged ovar and an uterine whose bulk is increased by the presence of fibrous tumours?

In addition to the succussion test we have the following. The enlarged ovar is always hard and nodulated: the cystic ovarian tumours, of unilocular or multilocular is smooth, soft, and fluctuating— and even in the multilocular variety, they have almost invariably an uneven and irregular surface with generally one or more solid tumours which appear inelastic and without fluid, yet fluctuating and a degree of softness exist over a certain extent of the tumour, especially towards its upper and anterior part, where usually the largest cystic is and where consequently the surface of the tumours feels most uniformly rounded.

This symptom does not materially assist in distinguishing between fibrous tumours of the ovar and ovarian enlargement. For though in general no sound is heard in the ovarian tumour and the so-called "unusually, in the case of the fibrous tumours, a sound similar to the placental" may be distinguished (the walls of the uterine being thickened and its vessels enlarged)—yet there are
exceptional cases. Dr. Montgomery, Boulland, Churchill, and others adduce instances in which ovarian tumours were accompanied by a distinct placental murmur, dependent upon the presence of some large vessel in their interior or produced by pressure upon some neighbouring artery.

In deciding as to which disease is present the rule of enlargement may assist us— if the tumour grows rapidly, it is not fibrous. The elongation of the uterine cavity furnishes another diagnostic mark; if the tumour be ovarian, the length of the cavity is in general not interfered with— if it be fibrous, there may be considerable elongation; this however only occurs when the growth is situated in the substance of the pericellic or beneath the mucous membrane; it is not present when the tumour grows from the exterior beneath the peritoneal investment.

But here exists another source of error. The uterus is in some cases drawn completely out of the pelvis, by being attached to the ovary. In a case observed by Cleghorn, it was drawn up to the neck. Defect then has several times occurred with the womb as far raised from its natural position, as to run the risk of being pierced by the trochar during the operation of paracentesis for evacu-
of an ovarian cyst—an accident which Poisson relates as having actually occurred to a surgeon of his acquaintance. In such cases, the ovary is not only drawn up, but has its cavity elongated. Still, the narrow, constricted character of the elongation, especially the circumstance of the cavity of the uterus running up in front of the tumour, might serve to distinguish it from a fibrous enlargement in which, for the most part, the cavity runs up behind the tumour.

The other condition of the uterus has been, at first sight, confounded with ovarian dropsy—viz. where the organ has become distended into a large fluctuating tumour, as a result of the accumulation of the menstrual fluids within its cavity, in consequence of imperfect hymen. The anaemia and emaciation, which usually accompany such a state of matters, might lend their weight to the supposition of acute ovarian disease. Such a case occurred in St. Thomas's Hospital under the care of Dr. Williams. The abdomen was much distended, and the disease at first thought to be ovarian. Upon examination per vagina, the imperfect hymen was discovered, and a fluctuating tumour, which, upon being puz
yielded a wash basin full of menstrual fluid. This case serves to illustrate a source of error in the diagnosis of ovarian disease from uterine affection, and also to indicate how we may protect ourselves from the mistake.

A fifth and last condition of the uterus which may simulate cystic enlargement of the organ is distention of its cavity by accumulation of serous fluid — hydrometra, in short. Here the lack of sensation would probably from the best means of diagnosis.

Collections of fecal matter in the intestines, are among the morbid states with which ovarian disease has been, at least for a time, confounded. And such collections are consistent with it may even be the cause of watery diarrhea — usually however the bowels are constipated.

The upper part of the rectum may be thus vitiated; it should made an examination for ovarian the tumor felt through its posterior wall, might at first lead us to suspect enlargement of the ovary. In this instance, a recto-vaginal exami-

nation would of course reveal the true nature of the case; or, if the finger be introduced into the vagina only, it will be found that the swelling retained an indentation produced by the finger.
a characteristic presented by no other tumour occurring in this locality. Accumulation of faeces in the sacrum, or on the left side just above the sigmoid flexure, may simulate an ovarian tumour for a time; but if our suspicion is right, we shall usually be able to dispel the enlargement by the administration of purgative medicines. A case is recorded of a married woman, who, not having been pregnant for years, became affected with a tumour at the lower part of the abdomen. At the 7th month, she was seized with all the symptoms of labour, but a vaginal examination showed that she was not even pregnant. A tumour, movable in all directions was discovered, under the use of aloeté purgatives & injections, the patient soon recovered. The tumour disappeared—a large quantity of fœcal matter having been discharged.

A distended bladder, has also been mistaken for ovarian dropsy. If, however, the precaution of emptying the bladder, either spontaneously or artificially, be resorted to, (it should be in all cases of differential diagnosis of this nature) we shall exclude this source of error. We may well take warning on this point, when we
find that, in several instances, the bladder has
been tapped under the erroneous supposition, that
the tumour, which it occasioned, was due to acute
urinary or peritoneal effusion; it especially when
we find that the mistake was committed, by so
great a man as John Hunter.

An inflammatory collection in the cellular tissue of the Pelvis,
may simulate enlargement of the Wary, in its
early stage. A very frequent locality for
such effusion is the cellular tissue included between
the folds of the broad ligament; where, by adding
its bulk to that of the neighbouring organs, it may
suggest the idea of enlargement of this organ. In truth,
the symptoms which accompany this circumcised
attack of pelvic cellulitis, are very like those
which accompany actual enlargement of the
Wary—not, however, from acute disease, but
from inflammation; though indeed it is not
all unlikely that, sometimes, the trophical en-
largement dates its commencement from the
its predisposition to, an imperfectly resolved in-
flammation—that the tumour in question, is
not a merely trophical cause: we may judge from
its history—it is recent, & its formation has
been attended with febrile symptoms—That it
is not ovarian at all, may be determined by its shape. In inflammatory tumours within the pelvis, is seldom, for the inflation is confined by the various reflections of the pelvic fascia, if these decide its configuration. When the cellular tissue of the broad ligament is the seat of the inflammation, the tumour, resulting thereupon, assumes a flattened form, and all doubts as to the nature of the swelling, will be dissipated in a day or two, by the extension of the inflammatory effusion, which opens up more and more, the fold of the broad ligament at length reaching the side of the pelvis, from which the serous fold is reflected, feeling as though it were fixed to the iliac bone. The whole effusion now forms a tumour, so large and heavy, like, so firmly attached to the side of the pelvis, that one might at first fancy it to be an exostosis. If the swelling, the true nature of which is not very clear, shifts its ground; it is evidently inflammatory. No solid tumours will do this.

We have another remarkable condition, described by Dr. Simpson, that may be confounded with ovarian droopy, which has only recently come under the notice of the profession. It consists in
an enlargement of the abdomen, filled either with solid tumour, or fluid, or air. Its nature is a puzzle, but its diagnosis is understood. When this morbid condition is present, the abdomen is often as protuberant as at the full term of pregnancy: the abdominal wall is tense, and frequently exceedingly sensitive. The enlargement sometimes comes on very slowly, and may continue for years.

He distinguishes between this enlargement of the ovarian tumour, by percussion, and by throwing the patient into a state of anaesthesia. In the case of the normal ovarian swelling, percussion gives a typical hollow sound; but if the tumour be ovarian, the sound is dull and flat. Sometimes, however, the tenderness is so great, that the patient cannot bear percussion, or the obesity may be such as to obscure the sound. We get rid of these difficulties at once, by determining the diagnosis very satisfactorily by having recourse to Clioform. When the patient is deeply anaesthetized, the ovarian tumour flattens & entirely disappears — so completely that the abdominal wall may be pressed down, until the diaphragm is felt, while the patient is at rest. There have been many speculations respecting the nature of this singular enlargement — it is not
due to the presence of any solid tumour, or to the accumulation of fluid, for no air escapes as the swelling subsides. Perhaps it is owing to an arch-like contraction of the abdominal muscles, the contraction being due to reflex action, the excitation of which is probably some irritation in the uterine organs; it is one of the innumerable forms, in which Hysteric, as intense in its character, manifests itself. 

It is not improbably that in, at least, a proportion of those cases in which the abdomen has been laid open for the removal of tumours, if in which, to the knowledge of the operator, no tumour of any kind was found to exist, the protrusion of the abdomen has been caused by the condition now referred to. The same explanation probably applies to those cases, in which pregnancy or labour have been so closelyimitated, that Caesarean section has either been performed or contemplated, in order to complete the delivery of a child, where in reality no child existed. Such a case occurred at Berlin in 1810, in which a celebrated surgeon performed the Caesarian operation, in the presence of several obstetric professors, many of whom had examined the patient. The woman was pronounced to be carrying an extra.
fathers, the movements of which were supposed to have been felt by some of the professors or by the woman herself. Only one of those present objected to the decision, on the score of some obscurity in the symptoms; accord-
ingly it was persevered in & performed; but neither
fathers, nor humour, nor even enlargement of any viscus,
was discovered. Caesarian section had nearly been
performed upon a woman in Dundee, suffering under very much the same symptoms; the nature
of the affection was in this demonstrated after
a time by the use of chloroform.
In the last place, there are certain enlargements
of the abdominal & pelvic viscera which are liable
to be mistaken for ovarian disease. Amongst these
may be noticed, a peculiar enlargement of the periton
several cases of which are noticed by Dr. Hamilton.
In one of these, the tumour occupied the right
iliac region, it had fallen down as low as the
groin; when Dr. H. first saw the case, the tumour
was exquisitely painful to the touch, & the woman
was evidently fast breaking. Dr. Hamilton readily
pronounced the tumour to be an diseased ovary; the
gentleman who called him in had before thought
it to be an extra uterine conception. The
post mortem examination proved that both were wrong.
It revealed the presence of an enormous oedemous tumour of the pylorus, the weight of which had dragged it down. Dr. H. gives another case in which he noticed oedemous enlargement of the caput accumuli coli for ovarian disease.

Encysted dropsy of the Peritoneum, or of the serosa upon which it is reflected, may be confounded with ovarian disease.

Sometimes the folds of the omentum become converted into a quiet cavity, within which a collection of fluid takes place. The Fallopian tube also occasionally becomes distended into a droplet-like bag. Very large cysts are at times formed in connection with the kidneys & uterus — sometimes communicating with the urinary canal, if depending upon its obstruction — in other cases, totally independent of this channel. It contains fluid which does not present urinous character.

Then these are encysted dropsy & hydatic cyst, connected with the liver. And with any of these cystic formations, if the case be ambiguous, we are liable to confound ovarian disease. Take for example a case related by Mr. Harvey, in which a cystic tumour was mistaken by several men of eminence for ovarian dropsy, & the patient
of excisionation has ever been proposed, but fortunately it was not carried out. Mr. Harvey resumes his tapping in preference, but the patient did not recover even from this. Upon dissection, a large cyst was found, connected with the left lobe of the hepatic organ. In cases of this kind, the eminence disease has usually been hydatid of the liver.

In the majority of cases of visceral disease it enlargement is referred to; the position and relation of the surrounding organs, & of the organ implicated, will enable us to decide on the nature of the affection; but in some cases, the diagnosis is involved in much difficulty.

There are two methods of investigation which may assist us in these difficult cases. The first, proposed by Dr. Simpson, is founded upon the fact that an enlarged ovary is organically connected to the uterus, by a short pedicle, so that the ovarian growth cannot be pushed upwards, without dragging the uterus along with it. It is an improvement upon a test which Dr. Hamilton at one time employed, to which he refers in these words: "When a circumscribed, indolent, movable tumour within the abdomen, on being pushed upwards (the patient lying in the horizontal posture) occasions the
sensation of drawing up the vagina), the disease is ovarian.

Subsequently, however, the Professor lost confidence in
this diagnostic mark, having seen, as he states, some
cases in which it failed. Still the test is a very
good one, if applied with the precision which Dr. Simson
directs — if the uterus be near the fore part, if the
sensation of drawing up, be noticed in reference to
it, it will to the vagina. We are directed to introduce
a sound into the uterus, to press it firmly against
the anterior abdominal wall, so as to fix the uterus;
then push up the tumour: if it drag on the
uterus, the tumour is ovarian, the pedicle which
connects the way the womb being so short, as not to admit
of the one being jerked up, unless the other be raised
also — if the tumour is loose it can be raised upwards
ten or three inches, when it is unconnected with the
uterus — it is not ovarian.

By this test we have it in our power to distinguish in
most cases enlargement of the ovary, whether from
accumulation of fat, or distension of its cavity by fluid,
or from any other movable condition. And partly use
this means of diagnosis were more fully employed,
we should be able to expunge from the future lists
of ovariotomy, all, or nearly all, those cases in
which in past times, an mental, instead of an
Ovarian tumour has been found. Notably in the same way cysts connect with the liver, tumours in the mesentery might also be distinguished.

With respect to enlargement and induration of the jejunum, acute but the continual symptoms serve to indicate the existence of so serious a disease? If once awake to the possibility of mistaking it for ovarian dropsy, is it likely that we shall fall into such an error especially if we make use of Dr. Simpson's test? It might perhaps not be so easy a matter to distinguish between enlarged ovaries of dropsy of the Fallopian tube, especially in the early stage. Fortunately however, this latter disease is rare, if there is little practical necessity for making the diagnosis, as both affect us in a manner to be amenable to the same treatment.

There is another instrument of diagnosis which remains to be noticed viz. the microscopic examination of the fluid contents of a suspected ovarian cyst, obtained by means of an exploring needle. Dr. Hamilton long ago proposed the operation of tapping as a means of discriminating between ovarian dropsy and ascites, le being dissatisfied with the points of distinction usually relied upon; though he placed principal reliance upon feeling the collapsed cyst after tapping has been performed.
he also points out as a diagnostic mark the peculiar appearance of the fluid which passes away from ovarian cysts - he describes it as "amber-coloured of the consistence of melted calf's foot jelly."

But, as Dr. Tilt has said, it is useless to look for any special characters in the physical appearance of the contents of ovarian cysts; for in post-mortem examination, we find them sometimes containing liquid serum, very light in density, whilst in others there is found a thick, albuminous, fluid, which has been erroneously considered as pertaining exclusively to ovarian tumours, whereas it has been found in lymphocele and other cystic structures.

If, however, we have recourse to the microscope, we are furnished with a diagnostic mark which the naked eye could never reach, i.e., which is not imitable, further enquiry will then to be pathognomonic of the disease. Dr. Bennett has shown that besides some constituents which are common to many tumours, there are, in the fluid taken from an ovarian cyst, certain cells, slightly granular in their aspect, of a round or oval shape, containing distinct nuclei. These corpuscles are grouped together to float in the fluid, appearing like flocculi of lymph.
They resemble those which line the interior of the
epithelial surfaces. These are the peculiar products of ovum
epithelial surfaces where they are to be found only in vitro. An accom-
panied microscopic observer, Mr. Eichet, affirms that during the whole course of his researches he
never met with these particular cells in the contents of
broodvesicles, seminiferous cysts, or any other cystic
formation of the human frame. The observations
of Dr. Bilt, Dr. Embleton, &c. all go to confirm
the views of Professor Bennett and Mr. Eichet:
If further observation proves their truth, we shall
have at hand a pathognomonic sign of ovarian
dropley; for by an exploratory puncture (which
is admitted to all to be innocuous) it will be
possible to remove a portion of the fluid, it upon
inspection we may form a confident diagnosis.
In fact, this has been done already, for in
one case in which there was considerable difficul-
ty of diagnosis, Dr. Bennett did not hesitate
to assert the existence of ovarian dropley, after
the examination of a portion of the fluid, removed
from the tumour; this prediction was subsequently
proved to be correct.
Such then are the diseases with which ovar
dropley is liable to be confounded, & such are
The various means by which we seek to distinguish between them.

The following may be given as a summary of the diagnosis between the ovarian diseases and the more common maladies respecting which mistaken identity is liable to occur.

In the 1st stage, while the enlarged ovary is still a pelvic organ, it situated between the rectum and uterus, 3 things may be mistaken for it--the accumulation of flatus. A retroverted uterus, an inflammatory collection in the broad ligament. The diagnosis between an enlarged ovary and an accumulation of flatus may be made by observing the retention, caused by the pressure of the finger in the vagina; or by making a recto-vaginal examination.

Between an enlarged ovary and a retroverted uterus.

By examining whether or not the cavity of the uterus retains its normal direction.

Between an enlarged ovary and an inflammatory collection in the broad ligament.

by the circumstance that the latter fails movable, as it were, fixed to the bone, so that it is accompanied by peritonitis whereas the former may be moved...
about, it is not attended with any peculiar symptoms.

In the 2nd stage, when the ovarian tumour has ascended into the abdominal cavity, there are 4 things which may perplex the diagnosis:—

1. The enlarged uterus, whether from pregnancy or fibrous growths. Peritoneal dropsy.—
2. Marked enlargement of the ovum;—An anomalous swelling, without any other tumour, the nature of which is not known.
3. The diagnosis between an ovarian dropsy & pregnancy.

By auscultation, or by the enervat.

Between an ovarian dropsy & the uterus enlarged by fibrous growths.

By percussion at the cervix uteri, which in the case of the enlarged uterus, causes an impulse that is conveyed directly to the hand placed on the tumour externally. If the tumour be ovarian, no such direct impulse is conveyed. transmitted.

Further, the ovarian tumour is hard & nodulated, whereas the ovarian is somewhat soft & fluctuating. It is not as distinctly taut.

Between an ovarian & a peritoneal dropsy.
by percussion over the umbilical region — if the tumour be due to ascites, a tympanitic
sound is produced — if caused by an ovarian
cyst, there will be a dull, flat sound.

Between an
Ovarian Tumor & a movable enlargement of the Omentum.
from the circumstance that the ovarian
tumours cannot be pushed up, without dragging on the
uterus — the omental tumours, can.

Between an
Ovarian Tumor & the peculiar enlargement within a Tumor.
by percussion, which affords a tympanitic tone
with the latter, but a dull sense with the former
by the effect of anaesthesia, which causes the
entire disappearance of the anomalous swelling.

We pass now to the consideration of
the treatment of Ovarian Cystic Disease.

II. On the Treatment.

On the treatment of Ovarian Dropsy there has been
much discussion & much discrepancy of opinion.
Many medicines have been proposed as efficacious
in retarding the growth of the tumors, in causing its disappearance; but of late years, as the faculty which bring over the diagnosis of the disease has gradually been disappearing, doubts have been thrown upon many of these cases of supposed cure, which are reported by older authors. The profession generally is becoming skeptical as to the merits of these historic remedies. For anything more than the mere palliation of attendant symptoms—We may briefly pass in review the various modes of treatment which have been adopted for the palliation or cure of the disease in question, commencing with:

**The Medical Treatment**

It has been attempted to cure ovarian disease by stimulating the functions of the natural menstruations of the body—by giving diuretics, emetics, cathartics. These have invariably failed even to diminish the intensity of the pain. Though the serious effusions into the peritoneal cavity or into the cellular tissues which occasionally accompany ovarian disease, certainly has been urged by the establishment of the latter. Mercury has been given with a view to retard or cure ovarian disease, but its use has been condemned by many writers, especially by Dr. Hamilton, who states in reference to it, that after having employed
it, we know it employed in many hundred cases, he cannot call to mind one in which benefit resulted. The use of mercury had a very injurious effect upon many constitutions, so it may be expected to be especially hurtful to that class of individuals, who present to be particularly liable to this form of disease. No doubt Mercury has considerable power in promoting absorption, and therefore may lead to the removal of recently organized lymph; but neither it, nor any other treatment is at all adequate to the removal of the immense cystic structure which constitutes the essence of the disease in question.

Dr. Hamilton's plan of treatment by firm compression of the abdomen, percussion, the warm bath, or a restricted course of the curative saline, is reported to have been successful in several cases. Dr. Hamilton states that the cure was always preceded by the gradual softening of the tumor. Is it possible, seeing that the diagnosis of ovarian adenoma was much more obscure 10 or 12 years ago, than at present, so its modes of spontaneous termination are as well understood - that in these instances, in consequence of the firm pressure on the abdomen or the percussion to which the tumor was daily subjected, that a cure was accomplished.
by rupture of the cyst either into the peritoneum, or
by the bowel? If the opening were small & situated
towards the upper part of the sac, there would be
no abrupt diminution in the size of the tumour,
to lead to the suspicion, that the fluid had found
exit in the way mentioned.
May we not in the same way, explain some of
these cases, which are said to have been cured by the
use of Baine & friction? It is said by competent
observers, that much has been repeatedly effected both
in Britain & on the Continent, by a long-continued
exhibition of Baine externally & internally, contin-
uing with abdominal friction & carefully regulated
compression. Whether, these were a mistake in the
diagnosis in these cases, or the case long sever, was
dependant upon rupture & discharge of the
 cystic contents, it is difficult to say.
According to Rayer, Bovin, Supplemo & others, the
same familiar softening took place in the tumours
after the prolonged exhibition of Baine, as in
Dr. Hamilton's cases which were treated with amsit
of lime. Out of 33 cases, in which Rayer treated
the disease with Baine, 3 patients who had mean
tumours as large as a child's head, were completely
cured after several months' treatment. The other
patients alarmed at some inflammatory symptoms to which the plan adopted gave rise, or discouraged by its testimony, abandon it. English practitioners like Dr. Elliston, Dr. J. Thompson, &c., who give iodine in cases of ovarian dropsy, allow that when it does effect a cure, its virtues depend on the exciting of inflammatory action in the cyst, by which means the cyst becomes adherent to some portion of intestine, which ultimately receives the contents of the bursting tumour. But Madame Cochin, Banyer, & others, tell us, without reference to such substance that they have often given it with the effect of softening the tumour & causing absorption of its contents. There seems to be no question respecting the power which iodine possesses, in some cases, of producing the softening now referred to, & we have instances of permanent cure upon testimony as respectable as almost to exclude the possibility of falsity in diagnosis. Still we may bear in mind that tumours the result of inflammatory effusion in various parts of the cellular tissue of the pelvis, more especially that which lies between the folds of the broad ligament and that which forms a stratum beneath the reflection effusion...
which covers the iliacus muscle, sometimes closely simulate, it has been mistaken for ovarian enlargement.

There is no doubt that tumours of this nature are perfectly under the control of absorbent medicines. It certainly was, by a very natural transference, that it came to be tried in ovarian dropsy, seeing that it had in many cases, so wonderful an effect on the allied disease—Bronchocele. It is well known the ovarian affection there appears to be some considerable resemblance. It is certain that Bronchocele has been greatly diminished by the use of bromine; it is equally certain that to all cases of the disease, even when very large, have been spared under its employment if without ultimate injury to the patient. But there is as little doubt that in several instances death has been hastened by the use of the drug, health ruined in consequence of its injudicious introduction into the system. With respect to its admin-istration in ovarian dropsy, it may be stated that the treatment is exceedingly tedious, being extended over the space of many months—that to give the remedy a fair trial, the system needs to be saturated with the drug; a proceeding which must necessarily tend to reduce still further
a constitution, in many cases, already weakly sustained—that the results of treatment are by no means certain. Dr. Seaman remarks that many cases have been published of its success, where too short a time has elapsed since the apparent diminution of the tumour, to allow of any accurate conclusion being drawn. It is impossible to think that its efficiency has been greatly overrated—lastly, it may be objected, that the cure, when it is accomplished, seems generally to take place by the discharge of the contents of the sac into the bowel; but seeing that we have no guarantee that the contents will certainly be thrown out by this channel, rather than into the peritoneal sac—seeing further, that in consequence of the inflammatory attacks which are apt to recur again and again during the exhibition of the remedy, the contents of the cyst are in all probability puriform, therefore in the event of extravasation into the peritoneum, almost certain to excite fatal peritonitis—we cannot but regard rupture of the cyst under these circumstances, otherwise than as fraught with the utmost hazard to peril to the patient. From the whole we may conclude, that in the majority of cases, we are not
justified in having recourse to a remedy, which
is frequently unsuccessful, which in its progress
toward the effecting of a cure, is attended with so
much risk, & which is liable to reduce the vital
energies of the patient. It so favours the growth of the
parasitic tumour that she carries within her.

These remarks apply also to the treatment by liquid
potatoes, meawy, prescire & friction. For all
of which are, in many cases useless; but may be
worse than useless.

The various plans of medical treatment now
refused to, are allowed even by their advocates to
be available only in that comparatively rare form
of the disease where the cyst is muscular.

Further conditions are, that the tumours be
but too large, & the health of the patient
otherwise good. But, as before stated, many may,
have in the obstetric profession, doubt the efficacy
of such remedial measures, in toto: amongst
these unbelievers may be mentioned Brooks,
Capron, Dr. Davis, Prof. Simpson & others. In
reference to medicinal medicines, Dr. Davis says,
"in an stage of development of the disease has
never ever appeared to exert the slightest influence
over the malady," & with respect to home cts
compounds, he has the following—"in his cases of
accepted doses, have then affixed to me, to have been
exhibited with the slightest benefit to the patient."
Dissipating them from our mind all notion of
arising the disease, or materially retarding its progress
by mere medical treatment—what indications we
main as to the management of the patient &
the tumour?
Dr. Simpson gives the following—in reference to
the patient, our aim must be
1. To keep her as near the standard of health as
possible
2. To arrest & reduce co-existent morbid states
of the abdominal & pelvic organs, (instance, an
irregular or deformed state of the bladder,) in order to
prevent the excitement of the diseased way.
With respect to the tumour itself, we have two
indications.
1. To regulate & alter its position in certain cases
2. To suppress all tendencies to local congestion
& inflammation in the diseased way.
Sometimes we find that as the tumour enlarges, it
becomes like the retroverted uterus, closely impacted
beneath the promontory of the sacrum, thereby becoming
itself much irritated, & interfering perversely with
The functions of the bladder & rectum. This state of matters may be altered for the better, by pushing up the tumour into the abdominal cavity, where it will have space to grow; the pelvic organs in the mean time regaining room for the healthy exercise of their functions.

Again, we occasionally find, that when the tumour is somewhat larger than the fist, it is apt by rolling about, to inflict mechanical injury on neighbouring abdominal & pelvic viscera. It may thus irritate the bladder, causing dysuria or incontinence of urine — or the bowel may be irritated, a detritus per- formance of function being the result. The tumour itself may be elevated to further action by thus rolling loosely about, hence, its fixation becomes a desirable object. This may often be accomplished by placing, around the abdomen, a bandage of chamois leather, provided with a cup that fits had into the concavity of which, the convexity of the tumour is received, as accurately as circum-
stances will permit.

The necessity for medical interference with a view to suppress local inflammation & congestion in the enlarging ovary, arises from the fact, that from time to time we observe the growth of the tumour to be accelerated, it becomes congested, semi-inflammatory,
For a time causes the patient much more annoyance than usual; after a short interval has elapsed, it again relapses into its former source of condition. During these inter-current attacks, the patient should remain quiet in the recumbent posture, if we may use this expression; a cloth or sheet over the turban; the application of a few leeches will also be of service. Plastering them about the arms, in order that the blood may be drawn from the hemorrhoidal veins; déblé sion from these appears to have the most marked effect upon a congested ovary.

Which, then, are the points to be attended to. In some cases, the relief afforded by these palliative measures is very considerable; but we are in danger of doing too much, rather than too little: if it must be admitted, that those cases which have been left entirely to themselves, often appear to do quite as well, or even better, than those which have had the doctor's interference.

We pass now to a more important part of the subject, viz., the Surgical Treatment of Ovarian disease.
The Palliative treatment includes Pneumocentesis or tapping.

The Radical, includes Barostomy, of which it has been attempted, though mainte-

nance of the opening into the chest, to convert tapping into a curative procedure.

As the preceding remarks have, however, been extended to a greater length than
their worth justifies, we shall

present the surgical treatment of the disease in a con-

densed manner, in the form of a series of propositions.

With respect to Pneumocentesis, we remark

1st, that the operation, when performed for the first time,
is a dangerous one.

out of 66 cases of first tapping 46 - Stafford Lee
15, or 1 in 4½ died within a few days.
22, or 1 in 3 in the first month

2d, that on the average, it does not prolong life more
than 18½ months

of 66 patients, 41 had died by end of first year,

so that more than two thirds may be expected to die
within two years.

3d, that the operation necessitates its own repetition.

the operation if it is performed, the operation it requires to be performed.

From a consideration of the arguments for, as well
as against the operation, we deduce the following:

1. That when it is essential to the comfort and
   existence of the patient, it greatly
   alleviates her distress,
   I may naturally prolong her life—hence under those
   circumstances, it is perfectly justifiable; unless it be
   shown that we have other preferable resources.

2. That when it is performed under less pressing circum-
   stances, it tends to shorten the patient's days—hence it
   must never be resorted to as an operation of complaisance.

3. That each tabbing deserves careful consideration, I
   hereby may be found worthy to supersede the operation
   which is performed at a later period.

Under the head of 

Radical Treatment 

are included 

Poultistry, 

Peeling, or means as to become curative.

The various plans by which a curative effect

has been taught, are alike in the leading principle

upon which they proceed; viz, the establishment of a

permanent aperture of exit, through which the cystic fluid

may constantly drain away— the contraction of the

cyst, or its ultimate closure being in this way permitted.

The opening is made through the abdominal fasciae,

through the wall of the vagina, or from the rectum;

according to another plan, the cavities of the cyst

if the peritoneum are thrown into one. The escape of
The fluid is direct in the three former instances; but indirect, when it goes into the peritoneal cavity; the constantly secreted fluid is effused over an absorbent surface, it is finally secreted by the kidneys.

Each plan of treatment finds its analogue in the surgery of Nature; none is applicable to any other variety of ovarian cyst, than the supr or bilocular.

With respect to these various modes of procedure, we draw the following conclusions:

1st. That the success which has attended the draining of the cyst per vaginam, by Nature (by the surgeon), is quite sufficient to warrant our having recourse to this measure, where the cyst is voluminous & felt bulging in the vagina, an indiarubber cannula being left in the wound in order to provide for the maintenance of the drain, & contraction being favoured by pressure on the abdomen. Dr. Simpson relates a case in which an enlarged ovary was punctured from the vagina, whilst still a pelvic organ. That after the fluid had been once or twice evacuated, its formation ceased, & the cure was effectuated. The patient subsequently remained completely free from her malady. Might not such a case justly serve as a precedent, in the treatment of an ovarian tumour, still confined within the pelvis & presenting distinct fluctuation?
if I maintaining the outward drain, he might fairly hope to put a stop to a formidable & surely fatal disease; 
and if measures were taken to keep down intususception & excitation, there is probably no more danger attending the procedure, than is connected with pelvic abscess; perhaps scarcely so much. The proceeding is all the more feasible, if the patient were beyond the fruitful period of life, for then there would be no interference with the process of menstruation, & the solid remains of the cyst, 20. Suturing the Rectum, though often adopted by Nature, has not often been practised by the surgeon. Probably in some of the cases before alluded to as being suitable for vaginal suturing, it might be found more convenient to pierce the cyst from the Rectum, if its inferior bulging portion lay nearest the bowel.

30. Subcutaneous incision of the cyst, is both warranted & advisable, if

a. the cyst be monolocular.
b. if its contents, as ascertained by exploratory puncture, are bland & albuminum.
c. if we can discover no proneness in the peritoneal membrane to take on inflammation. How far this accident is likely to occur in any given instance, might be difficult to ascertain. The history of the case
would throw some light upon the point; as also the result of the exploratory puncture, & the degree of susceptibility upon handling the tumour.

The statistics of accidental rupture into the peritoneum, lend countenance to the operative invitation.

Out of 71 cases collected by Dr. Tilt, the rupture proved fatal in only 22 instances; it affected relief to 19 patients, & is reported to have cured 30.

These statistics would seem to place this accidental rupture quite on a par with the accidental artificial opening of carcinotic, both as to its immediate & ultimate results. First tapings are fatal in 1 case out of every 4½; if 1 patient in every 3 dies by the end of the first month. Whereas an internal rupture of the cyst, the mortality is about 1 in 3½; if it is reported to have cured well or to one half of the patients in whom it occurs.

An intentional rupture by lumbotamnsec incision, he certainly need not expect a greater mortality, but rather a diminution of fatal cases. For, 1st, he should believe the principal cause of death, viz, the extravasation of placental thick cheesy fluids, or solid matter of keratin, fat—substituting for these, a thin bland fluid. 2nd, the most favorable time of circumstances would be chosen for the operation; 3rd, be taught & reasonably hope, in most cases to avert, by the use of chloroform.
counter-pressure of other suitable remedies, the death which has sometimes resulted in cases of accidental subitaneum from sudden shock to the nervous system.

Firstly, in our artificial interference, might we not hope to increase the number of permanent cures to a greater percentage than two-thirds of the whole? In those cases where the cyst re-fills, the subitaneum through which its contents have passed into the abdomen, appears to close after a longer or shorter interval. Often re-adhesion may occur. This being the case, does it not seem probable that we might convert at least some of these partial cures into complete recoveries, seeing that we have the opportunity of choosing a favourable point for our artificial laceration. By entering the wound, may render the subsequent adhesion of its edges much less likely to occur?

Altogether it seems very probable, that if this operative procedure were resorted to by the profession in time to come, its statistics in contrast very favourably with those of tapping, it would also present a marked improvement upon those now referred to, which show the result of Nature's handy work.

With respect to

5th Permanent draining of the cyst, through the abdominal well, it may be stated that numerous instances are
in record in which Nature has relieved herself from
the vexed accumulation by this method; the opening
in most cases remaining fistulous for a longer or shorter
period. In the plan of Nature, we observe: 1st. Adhesive
inflammation between the surface of the cyst and the anterior
abdominal wall; 2nd. the formation of a small,
oblune, limnic aperture for the escape of the fluid;
3rd. the gradual discharge of the cystic contents.
Of all the plans of treatment which have been proposed
in imitation of this natural method, in none are
all the particulars so closely copied, as in that
advocated by Dr. Stitt. Having previously weakened
the abdominal parietes at some point, by an escharotic,
he permits Nature herself to clear the cyst in tem-
poral manner, by a plantific ulcerated aperture. I
thereby excluded the principal danger—the entrance
of air into the newly-opened cavity—which is much
more likely to happen when a direct incision is
employed, as in the plan proposed by Mr. Cambeige,
in others also.
Dr. Stitt's plan has been quite successful in the two or
three cases in which it has been tested. Success has attended
a somewhat similar plan of treatment in hydrated cysts
of the liver, which has been extensively employed by Professor
Recamier.
With respect to the Tabbing & Injection of the cyst, as in Hydrolele, it is universally admitted that the operation is very serious to the patient. It has been fatal in several cases, and has fallen into disrepute.

In reference to Ovariotomy, the following particulars may be enumerated.

1st. That the errors in diagnosis as to the nature & even existence of the tumour, have been very numerous.

Out of 118 cases by Mr. J. Lee — an error of diagnosis occurred in 24 instances; the chance of mistake then has been hitherto, as 1 to 5.

In 81 cases tabulated by Mr. Phillips, a mistake was made in 11 instances; in 5, no tumour at all existed; in 6, the tumour was not ovarian.

2nd. That although it is highly important to ascertain before-hand the existence & extent of adhesions, it is almost impossible to do so in many cases.

In 40 cases, that of the 81, adhesions existed; 12 in 15 of the 40, they caused the discontinuance of the operation. Out of these 15, 6 terminated fatally.

3rd. That where a mistake occurred respecting the nature of the enlargement, the tumour was found to be either uterine, or ovarian, or was due to the
anomalous swelling which has before been described.

That we may hope to diminish considerably errors from these sources, by a careful use of the otoscopic sound, by auscultation & percussion, by the exploratory puncture, & by anesthetizing the patient.

That the mortality attendant upon ovariotomy, is no greater than that which accompanies many of the capital operations of surgery. It would appear that the mortality of ovariotomy amputations, taken in mass, is 4 in 10, or 1 in 2½; precisely the same as in ovariotomy, and further that in amputations of the thigh alone, the rate of mortality is 6 in 10—one half greater than in extraction of the ovary.

That out of 91 cases of ovariotomy in Mr. S. Lee's table, where details were given respecting the tumours, 30 were solid & multilocular; 41 were monolocular; or considerably more than one half. Of the 30 cases of solid tumour, 11 died, & 19 recovered; of the 41 cases of monolocular cysts, 10 were fatal, & 31 were followed by recovery—so that with monolocular cysts the chance of death is as 1 to 3; but with solid & multilocular tumours, the risk of death is as 1 to 2.

That according to this calculation, at least in one half of the cases which are subjected to the dangerous operation of ovariotomy, the cyst is monolocular; but
we have other & safer remedial means for this description of ovarian tumors. Hence we have no right to subject our patients to the danger it perhaps failure of ovariotomy, if we have previously ascertained the character of the tumor to be such as admits of our using the safer & milder treatment.

8th. That in performing the operation of ovariotomy, the short incision is preferable to the long one, which as it is proved by statistics, to have been attended with less danger.

Where the short incision was used, the proportion of recoveries was 48 per cent.; with the long incision, only 22 per cent.; it admits of question, however, whether this difference might not depend in part, upon the nature of the connections of the tumors, or those cases in which the long or short incisions were respectively adopted.

The best rule probably is, to commence with a small incision, & enlarge it if necessary, unless indeed we adopt the opinion that ovariotomy should be reserved for multilocular or solid tumors; for the exaction of such, the long incision we probably be necessary in every case.

We sum up the treatment of ovarian disease with the following:
Practical Deductions.

1st. That when the tumour is of a slow chronic type, it is inconvenience & deformity from its bulk, rather than a source of immediate danger from the gravity of the attendant symptoms. It is entirely inadvisable to expose a patient otherwise in good health, to the dangers inseparable from operative interference. In such cases, our treatment must be restricted simply to hygienic measures.

2nd. That if we meet with a dermo-sarcoma, still resident within the pelvis, with fluctuation very distant, & general characters such as to lead to the conclusion that there are but one or two cysts, we are justified in puncturing the tumour & provoking for the constant draining away of the secreted fluid; seeing that we have, by such treatment, a very fair prospect of cutting short a formidable & necessarily fatal disease, without much risk to the patient.

3rd. That when circumstances are such as to demand our interference in a case of ovarian disease, the first point to decide is, whether the tumour be unicellular or multilocular.

If uni or bi-locular it without much solid deposit, the best mode of treatment is, to seek its radical cure by establishing a permanent opening in
the cyst wall, so that the contents of the ampulla shall pass away either by the vagina, or rectum, through the abdominal wall, or by the kidneys through the intervention of the peritoneum.

Further, noting that an

7th. That the permanent opening of the cyst, with a view to the radical cure of the disease, is decidedly preferable to mere palliative tapping on the one hand, or to the more summary and more fatal portion of ovariotomy, on the other; in the muscular form of the disease.

8th. Seeing that an important element in this plan of treatment, is the maintenance of steady and well-arranged pressure over the cyst, that this object is attained in the best possible manner by the gradual enlargement of the gravid uterus, pregnancy is highly desirable as greatly contributing to the success of the treatment.

9th. That Total Extraction should be reserved for cases of multiple ovarian cysts, or those unilocular cysts where there is a considerable amount of solid deposit, unless from their slowness of growth, or the absence of urgent symptoms, they do not menace the patient's life.

In cases of this nature, where the patient is doomed within a short period, we are warranted, from the
amount of success which has attended the question, to advise it perform osiostomy, if other circumstances are favorable; previously taking care to establish an accurate diagnosis, by availing ourselves of all those instruments of research investigation, which extended research has furnished.

I have now completed my prescribed task, & a task it has been —

in writing a Thesis as a preliminary step to graduation in Medicine, the young student labors under several disadvantages and the difficulties which surround him usually denies the Graduate & more completion — to seeking refuge in known facts & great names — True there are some who surmount every hindrance, it besides dissertations of considerable merit — To such the arena of Thesis writing there a field for fair & honorable distinction — for separating the more deserving & talented from the crowd, & indicating to whom we must look for the future advancement of Medical Knowledge — We who are of humble souls & pretensions, cordially salue
our need of admiration of praise to these brighter stars; It far from grudging them their honors, we acquiesce with pleasure in the decisions of the Senate. Still very few attain these distinctions—very few are competent to attain them; and the great majority of students must be satisfied with passing creditably through their various academic exercises, leaving brilliancy & distinction for the gifted few. In most cases, these are very imperfect, from the circumstance that but little time can be devoted, in many instances, to their preparation—other causes which conspire to produce this defectiveness, are, imperfect opportunities for, immature powers of observation—almost unavoidable deficiency in amount of required previous information—want of confidence sometimes unfounded—more frequently perfectly just, in the natural & acquired competence & fitness for the task.

In the present instance, these causes of deficiency have conspired to the production of a Thesis, for which every apology is demanded.