Gynecological Diagnosis

with

Special Reference to Pain.

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Introduction.

Of all the evils that befall mankind, physical pain is probably the one that has been most greatly feared; it is so still. It was man's fear of pain that led the church to burn the unbeliever at the stake in bygone ages, induced the law to employ the rack or the thumbscrew until recent times, and to-day inspires the savage to put his prisoner to death by torture or offer up his child upon the altar of an angry deity who has sent some dread disease upon his tribe from which he himself may be a sufferer on the morrow.

Pain so inflicted is, however, only a fraction of that which is inflicted upon man by nature. And so, as far as history goes back, as men have thought of those who do their work in daily pain, of the multitude who toil on beds of sickness, of the numbers, not a few, who long for death to come to them, they have asked themselves the question, what is nature's purpose in inflicting it? It may quite well be, indeed, that the question is as old as human pain itself. Those who declare, in fancy's flight, that pain taught
practicable man to pray, if wrong in their conclusion are not at least, without excuse. That pain serves some good end, however, is not difficult of demonstration. If we put a frog to place a piece of paper dipped in acid on its flanks, the corresponding leg is raised to get rid of the irritating substance; or, if we hold down the corresponding leg, the opposite leg attempts to remove the irritant. Such experiments show, as has been pointed out repeatedly, that a reflex mechanism is a safeguard against injury. Sensibility, which we must also take into account, calls intentional movement into play which acts as a further safeguard against harmful influence. It is true that movement, whether reflex or intentional, may be injurious but, if so, pain summons intellect to its assistance in the case of man, as something corresponding to it in the case of many of the lower animals. Mechanical interference minimises the effect of hurtful movement. Indeed, the force of will is sometimes all that is required. Hillion in his classical work on Rest & Pain (4th edn., p.4) after describing what he imagines must have been
man's feelings when, having been driven out of Eden, he was for the first time wounded - his own pain, through loss of blood, his recovery of consciousness, his wonder as day by day he saw the wound healing up. He goes on to say that his purpose in trying to picture the first of human accidents was to show the promptings of nature. "Under injury, pain suggested the necessity of rest, indeed compelled him to seek for rest. Every deviation from this necessary state of rest, brought with it, through pain, the admonition that he was straying from the condition essential to his restoration." So, too, Herbert Spencer in his Principles of Psychology (Par 124). "If we substitute" he says "for the word pleasure the equivalent phrase - a feeling which we seek to bring into consciousness or retain there, or if we substitute for the word pain the equivalent phrase - a feeling which we wish to get out of consciousness or keep out, we see at once that, if the states of consciousness which a creature endeavours to maintain are the correlates of injurious actions, if the states of consciousness which it endeavours to expel are the correlates of beneficial actions, it must quickly disappear through persistence
in the injurious \& avoidance of the beneficial. In other words those races of beings only can have survived which, on the average, agreeable or desired feelings went along with activities conducive to the maintenance of life, while disagreeable \& habitually avoided feelings went along with activities directly or indirectly destructive of life; these must ever have been, other things equal, the most numerous \& long continued survivals among races in which these adjustments of feelings to actions were the best, tending even to bring about perfect adjustment.

To the practitioner, however, the value of pain is its value as a symptom of disease which, by correct diagnosis \& suitable treatment, he may be able to cure or at least to alleviate. It may not be the symptom which in general practice he is most often called upon to consider, but in gynecological conditions it is the one thing which often more than any other leads the patient to seek his advice. And that not only because no one desires to be a sufferer but also because it is the most constant symptom of such conditions \& may indicate some grave organic trouble. It may signify little but, as a rule, it builds largely with the patient, even as, on the contrary, malignant
disease accompanied by no pain is frequently unheed until too late.

To the practitioner the value of pain as a symptom depends to a very considerable extent upon the method of his inquiries concerning it & his investigation of its presence or absence. And therefore before dealing with some of the more notable Diseases of Women the writer will discuss in a preliminary section some of the difficulties which beset the practitioner in trying to appraise pain in women at its proper value. & thereafter some particulars concerning pain especially gynecological.

Some Difficulties in Appraising the Diagnostic Value of Pain.

There is first of all, the fact that when women complain of pain they are inclined, upon the whole, to understate its severity. This is probably because they bear it better than men, a majority of them being accustomed to a slight degree of monthly pain & many of them suffering the added pains of labour. There is next the fact that women vary
greatly in susceptibility to pain. Some of them
describe pain of a particular degree of severity as
being slight, & others, many of whom are neither
numbness nor hysterical, describe the same degree
of pain as being almost insufferable. This personal
factor is often the result of environment. The woman
who does her own household work, or who is engaged
in some kind of physical labour, or who engages
regularly in physical exercise which takes the place of
the muscular exertion of women who must work
in vain, & like them, thereby eats well, sleeps well,
develops & maintains a healthy condition of body &
mind, is a woman who like them, speaks lightly of
pain. The woman on the other hand, who has no occu-
pation, depletes physical exertion, has no interest in
life except herself, and, in consequence, becomes mor-
ibly unsatisfactory or drifts into ill health is a
woman who feels keenly every painful sensation she
is called upon to suffer, & akin to her is the
whose work is chiefly of a sedentary nature & she,
again, whose life is full of worries. These women,
not yet nervous wrecked, become such sooner or
later according as they have or have not inherited
a tendency to nervous weakness. Sometimes
however, the personal equation is quite perplexing.
There is the woman who has been so healthy all her life that she has practically never suffered pain but who, at last, is called upon to bear it & describes it in exaggerated terms. But more perplexing still is a case which is more common, said & quite a contrast; for it is a matter of not infrequent experience that the weakly woman, pinched in feature, pale, dark rings round the eyes, careful of gait, with a hand on a tell-tale spot, & every other sign of sickness or sorrow, bears pain surprisingly & describes it in terms totally inadequate to represent her suffering.

Two additional types of women must be reckoned with: the hysterical woman & the neuroasthenic. The hysterical woman has lost her self-control & become possessed of a craving for sympathy so strong that it leads her to mince the symptoms of almost any disease with which she happens to have some acquaintance. Along with psychic go well known motor, sensory or special sense phenomena, the sensory manifestations being hemi-anæsthesia, paraplegic anaæsthesia, glossus-hystericus, pain and hyperæsthesia. Hyperæsthetic areas or hyperesthesic spots are especially common in the ovarian regions. The neuroasthenic woman on the other hand, has no desire to play the part of the invalid & generally one
System of the body is distinctly more affected than the others. In the cerebral variety of neurasthenia she is troubled with morbid dooms and fears, an irritable temper, a bad memory, inability to concentrate the mind on one subject for any length of time, or headache. A sensation of pressure on the vertex or constriction round the head is almost characteristic. In the Spinal variety there is pain in the back, tenderness here and there on tapping the vertebral Spine, neuralgic pains, often numbness tingling in the limbs & always a feeling of prostration after even slight exertion. Besides other symptoms, there are in the Cardiac variety pseudo-angina or flushing; in the Digestive pain after eating or flatulence; in the Genito-urinary amenorrhoea, dysmenorrhoea & frequency of micturition. The two diseases are differentiated in various ways. Hysteria comes on abruptly in strong women who have generally little desire to get rid of their symptoms & in whom anaesthetic areas are nearly always present so that, for example, the epiglottis or the conjunctiva can be palpated without causing discomfort. Neurasthenia, on the contrary, comes on gradually in weak women who feel about their incapacity for work & desire to be restored to health, but whose exhausted nervous system
Exaggerates painful impressions. The pain of hysteria does not follow the lines of nerve distribution whereas the pain of neuroasthenia does. The kinds of women are alike in often overstating the severity of their suffering.

Both conditions may be due to gynecological disease or they may not; it is imperative to remember that they are not to be diagnosed till repeated examinations have demonstrated the absence of early organic disease in the pelvis or that spinal or cerebral disease must also be excluded.

Since women vary so much in their susceptibility to pain and in describing its severity it is necessary to have some method of trying to gauge the measure of their suffering, exact knowledge in this respect being, of course, impossible from the subjective nature of pain. Sensitiveness to visceral pain cannot be tested but sensitiveness to referred pain can be tested in a rough way by Ribman's method, which is to press upon the styloid process in the neck. Light pressure causes pain in a very sensitive patient while more rate or forceful pressure is required to elicit it in a patient of average or less than average sensitiveness respectively. Correctness of statement can sometimes be checked by facial expression. A woman who says she is suffering intolerable pain is not stating but over-
stating a fact to which she wishes to direct attention.

If her face is animated or even placed when she makes
the statement. When pain is present the facial expression
is altered variously but it is never cheerful or never
indifferent. When pain is severe other symptoms and
signs are manifest. As a rule it causes the skin to
become moist, the pupils dilated. The breathing some-
what quick. When it is very intense there is more marked
dilation of the pupils, more rapid breathing, a high
blood pressure, the perspiration stands in beads upon
the skin till it rolls off in little streams. The patient
soon becomes faint. In the case of dysmenorrhea
in which the pain is often very severe a good test is
the number of hours during which the patient cannot
work; while, if she has no work to do she is probably
neurasthenic, if so, her statements are to be dis-
counted accordingly (Dr 13arbour's Lectures).

Some Points concerning Pain.

In kind pain may be Spontaneous or Evoked.
Spontaneous pain may be felt during rest, or
during movement only, or during rest & become inten-
sified by movement. As a rule, when it is felt with
the patient in an easy recumbent position it signifies an acute inflammatory process such as appendicitis or pelvic peritonitis. Generally in chronic cases pain is produced by voluntary or involuntary movements of the body.

Spontaneous pain may be felt in the affected organ or tissue or be referred to some distant part as when a patient with metritis complains of pain at the inner side of the knee, or one with ovarian disease of pain in the breast.

Evoked pain or tenderness is often a valuable aid in diagnosis. Thus it at once differentiates acute peritonitis in which both pain and tenderness are present from intestinal colic in which there is no tenderness & pain is relieved by pressure. Or again, in the case of a woman who complains of pelvic pain, tenderness may be elicited in the absence of a recognizable lesion; or it may assist in determining the presence, site, & cause of such a lesion as, for example an enlarged Fallopian tube. In gynecological diseases it is important to demonstrate the presence of tenderness as well from the patient's point of view as from the practitioner's. For, as pointed out by Courty, a woman can then no longer ignore her disease, & as Professor Howard Kelly has said,
The reproduction of the same pain in the same spot inures her hearty co-operation in carrying out measures necessary for her relief (W. McLean's Translation of Cooney's Diseases of Women, Ovaries, Fallopian Tubes, p. 14; Kelly's Medical Gynecology, p. 29).

Tenderness like pain may be referred, or rather there is a kind of pain which is a hyperaesthesia of the cutaneous structures in areas more or less distant from those which overlie the seat of the causative disease. Such cutaneous sensory areas have been delineated by Head as associated with the different viscera and generally each of them contains two smaller areas where the hyperaesthesia is more marked. They are related to the viscera through segments of the spinal cord which innervate both of them. Thus on reaching their respective segments by the sympathetic fibres abnormal impulses from diseased organs force outwards along certain sensory fibres whose exact nature is at present unknown, the result being referred cutaneous pain with the possibility of its being intensified by slight pressure, or referred cutaneous hyperaesthesia which can be elicited by the lightest touch. According to Head the_ovary is associated with the tenth dorsal segment, the Fallopian tube with the eleventh and twelfth dorsal and the first lumbar segments, and the
uterus with the eleventh or twelfth dorsal or third or fourth sacral segments of the cord. The uterine or
gluteococcygeal area has maximal points of tenderness
close to the great trochanter or above or to the inner side
of the knee; the Tuber, or Sacro-iliac, above Pooepa's
ligament at the level of the internal abdominal ring &
a little to one side of the last lumbar & first sacral
spines; the Ovarian or Umbro-umbilical, about
half way from the umbilicus on a line running
from it to the anterior superior iliac spine, and a little
to the side of the second lumbar spine.

Hypersensitive cutaneous areas are not always
present but when present indicate deep-seated
disease & generally also its site. Although on rare
occasions the causal disease may be on the opposite
side of the body, the mistake of wrongly locating it
is avoided by eliciting true tenderness on the other
side or if true tenderness be absent, by appealing to
other symptoms or physical signs. Sometimes they
are helpful in differential diagnosis as, for
example, between diseases of the uterine appendages
& the vermiform appendix. Referred hyperaes-
thesia is elicited by gently pinching up the skin,
is proved to be referred by the patient being
unable to discern between a pin head & a
pin point being drawn over the affected part, its area is marked out by passing the ball of a small spherical headed pin, or something similar, over the skin in different directions, care being taken to exert only moderate equal pressure whilst doing it so that the patient's eyes do not follow the observer's hand.

The Mode of the Onset of pain is important. It may be sudden indicating sudden over-stimulation of healthy nerves, or gradual indicating some pathological change in previously healthy tissue the nerve supply of which has gradually been irritated or actually attacked in the progress of the disease causing it. Pain with a Sudden onset occurs in such conditions as perforation of the uterine, acute inversion or retroversion of the uterus, torsion of an ovarian pedicle, rupture of an ovarian cyst or of an ectopic gestation.

Pain with a Gradual onset occurs in such conditions as cystitis, metritis, endometritis, salpingitis, ectopic gestation before rupture, carcinoma uteri, or deciduoma malignum.

Pain may be Constant as in kidney
Weakness of the muscles of the back, injury to the sacro-iliac joint incurred during parturition, uterine displacements, impacted pelvic tumours.

Intermittent pain is found in conditions such as constipation, flatulence, pelvic tumours, prolapse of ovary, inflammatory conditions of the ovaries & tubes especially if accompanied with suppuration. Pain which begins as intermittent often becomes continuous with exacerbations if its cause is not removed but allowed to set up pathological changes in the tissue involved. Intermittent pain is often neuralgic in origin, in which case it is confined to the course of the affected nerve, but neuralgic pain may have no connection with a pelvic lesion.

The periodicity of pain in gynecological disease has reference to its occurrence at or between the times of menstruation only, but it is convenient to use the term in reference also to coitus & defaecation. Dysmenorrhoea may occur when no definable lesion can be made out or when such conditions as prolapsed ovaries, salpingo-oophoritis or endometritis can be detected. Regular monthly pain occurs also in cryptomenorrhoea. About intermenstrual pain, so-called, practically nothing is
Known beyond its recurrence at definite dates between its periods and its frequent association with diseased conditions of the appendages. Dyspareunia occurs in mental conditions, abnormal anatomical conditions and when there is disease or tenderness of some part or parts of the genital tract. Some women who have suffered from pelvic peritonitis are troubled with pain before defecation owing to the stretching of adhesions by the peristalsis of the lower portion of the bowel.

The Character of pain is of some diagnostic value when rightly described. Pain may be:
- Aching, as in endometritis or congestive dysmenorrhea;
- Boring, as in the sacro-iliac joint in chronic salpingitis;
- Burning or itching as in inflammatory conditions of the external genitals; Burning or Scalding, as in micturition in many pelvic conditions; Burning Down, as in many uterine conditions, habitual overdistension of bladder, haemorrhoids or prolonged standing; Cutting, as in acute pelvic peritonitis or cellulitis; Dull or Steady, as in prolapse of the uterus; Dragging, as in uterine displacements; Gripping as in appendicular colic, enteritis, or salpingitis; Gaunching, as in ovaritis, cervical cancer, or tuberculous disease of a lumbar vertebra; Nauseating or Sickenings, as in enteritis, t.
Sometimes, in prolapsed or inflamed ovary; Smarting, as in cervical carcinoma or after menstruation when the neck of the bladder is ulcerated; Spasmodic or Paroxysmal as in spasmodic dysmenorrhoea, ectopic gestation, torsion of an ovarian pedicle; Rending or Tearing, as in rupture of a pyosalpinx or of a pregnant tube; Throbbing, as in pelvic abscesses or some inflammatory affections of the appendages; Crampy, Colicky or Expulsive as in so-called obstructive or in maeandrous dysmenorrhoea, rupture of ectopic gestation, fibroid polypus, cancer of the body of the uterus or deciduoma malignum.

Pain varies in Severity from being so slight that it is "scarcely worth speaking about", as in minor degrees of uterine displacement, to being agonizing, as in acute salpingitis, appendicitis, generally the more acute the condition, the more intense the suffering. There is no constant relation however, between the severity of the pain and the seriousness of the disease. Thus uterine cancer which is usually very painful, at any rate in the later stages of the disease, may run its whole course without giving rise to pain. Sir J. Y. Simpson pointed out that the severity of pain has sometimes a relation to the site of the disease as in cancer of the body of the uterus which often causes paroxysms of
Severe pain whilst cancer of the cervix causes no pain till it has passed beyond the cervix; similarly Sir A. N. Simpson has pointed out that so long as cancer is confined to the mucous membrane of the uterus it causes little pain but when it has attacked the uterine wall it causes intense paroxysmal pain. As might be expected, pain may vary in degree according to the position of the patient or the movements of the body. Thus it is generally least marked when the patient is lying down, more marked when standing, most marked when doing hard physical work. The sitting position may intensify pain in a patient with an hypertrophied cervix especially if it is erect; it often increases it. exacerbations of pain may arise from exercise, fatigue, temporary congestion, retention of secretion or fresh infection. Most pelvic pains due to congestion are relieved by lying down, but if uterine this relief occurs more slowly if the uterus is displaced backwards. The pain of congestive dysmenorrhoea is lessened but not entirely relieved by the recumbent position that of salpingo-oophoritis is slightly diminished. On the other hand the pain of spasmodic dysmenorrhoea is not relieved by lying down nor is that of uterine colic or various other conditions. Pelvic pain is generally increased at the menstrual period, but it may not be a
it may be decreased as in the case of diseased ovaries where the pain may not be augmented for the first day or two of the period or may even be diminished.

The Seat of Pain is of value in that it often indicates the seat of the lesion causing it; although if the lesion is deep seated the pain may be of the referred variety.

In gynecological conditions pain is most generally felt in the iliac fossa of the right side from which it extends to the lumbosacral or the hypogastric region. According to Count de Courcy the frequency of left sided pain is due to the uterus, which is normally inclined to the right, pulling on the broad ligament of the opposite side, or, when increased in size or with weight, pulling upon it, increased force; according to Dr. Herman, to the left side of the body being normally weaker than the right; according to other authorities, to the left ovarian vein passing behind the sigmoid flexure and entering the left renal at a right angle. Uterine, tubal & ovarian conditions are about equally operative on both sides. Right Sided Iliac pain probably comes next in frequency.

The Lumbosacral region is the next most common site for pain; where it may be due to such causes as dragging on the ischio-sacral ligaments,
Posterior parametric, pressure of a pelvic tumour, injury to the pelvic floor, cervical catarrh in which the pain is more confined to the sacrum, retrodisplacement especially with adhesions, in which the pain is distinctly low down. Often it is due to anaemia, neuralgia, constipation, or it may be caused by renal or rectal conditions. Lumbosacral pain radiates into the thighs when a pelvic tumour presses on a branch of the sacral plexus.

Pain felt in the hypogastric region is not so common. It is generally indicative of some congestive or inflammatory condition of the body of the uterus, is much aggravated by walking or active exercise, and infrequently radiates down the anterior or inner aspects of the thighs. It may be due to causes not gynecological such as cystitis, neuralgia of the lumbar nerves, or hysteria. If sudden in onset it may point to threatened abortion, or, if sudden or severe, to acute distension of the urinary bladder, or acute inversion of the uterus. Hypogastric tenderness on the other hand, is very common.

Pain felt throughout the genital area, which includes the pelvis and small of the back, the region between the umbilicus and the knees, occurs most typically in some cases of dysmenorrhea.

Abdominal pain may be diffused throughout the abdomen as in ruptured ovarian cyst, or be more confined to
One side or when the pedicle of an ovarian cyst becomes twisted. Right-sided abdominal pain lasting for months or years is not uncommon, according to Professor Howard Kelly, who, while pointing out that its cause may lie in "any link of the chain of organs on the right side of the abdomen"—gall-bladder, colon, vermiform appendix or uterine appendage—says that in his experience it is most generally due to displacement of the kidney with tinkling of the ureter and retention of the urine in the renal pelvis (Kelly's Medical Gynaecology, p. 28).

Perineal anal or rectal pain may be due to uterine causes such as displacement or hypertrophy of the cervix, but such local causes as fissures or haemorrhoids cannot be left out of account.

Vaginal pain is rare in chronic cases though tenderness is often elicited by examination or coitus. In acute cases it is mostly due to peri-uterine conditions such as pelvic peritonitis or perimetritis abscess. Vaginal pain coming on gradually may be due to gonorrhoea, or a Bartholinian cyst or abscess causes great pain in the vulva.

Pelvic pain may be due to uterine or ovarian tumours, peri-uterine conditions or, occasionally, to the abuse of alcohol.

Coccygeal pain may be due to an injury incurred in labour or otherwise, perinealtes, caries, neuralgia, or, sometimes, to an unrecognized fissure.
Pain in the region of left breast + the epidurium is exceedingly common, & Headache is very common though not so often due to uterine causes. When headache is due to uterine conditions it is more often occipital than vertical & it is often possible to discover areas of cutaneous hyperaesthesia.

Shifting pain, in one place one day & in another place another day, often indicates flatulence, rheumatism, peritoneal adhesions attached to the sigmoid flexure, or hysteria.

**Displacements of the Uterus.**

*Anteflexion* gives rise to two outstanding symptoms, Uterine dysmenorrhoea & sterility, or to less distinct symptoms, aching in the back, dyspareunia, painful & frequent micturition, amenorrhoea, menorrhagia, menorrhoea or various nervous phenomena. The pain of the dysmenorrhoea is due to the flushing of diseased uterine & often, also of diseased peritoneal tissue with blood at the menstrual period (Hunt & Barrow's Manual of Gynaecology p 364). It is felt for a day or 2 before menstruation, increases in severity like the flow begins, decreases as the flow becomes free.
it usually ceases before the flow stops. The pain is
reflexive in character, severe. It is most intense in
the middle line above behind the pubes, if it passes
down into the thighs. It is prone to increase in
severity as time goes on, especially in long standing
cases, to extend through the whole of the pelvis to the
lumbo-sacral region. So by slow, neurasthenic pains
may be added to the suffering of the patient.
Examination in a congenital case finds a short
conical cervix, perhaps almost normal in position, but
often directed forwards showing a pin-hole, or
the normal uterine curvature is increased. In an
acquired case body and cervix are pulled backwards to
there is thickening behind. Rectal examination finds
the auto-sacral ligaments shortened or the presence of
adhesions. A sound passes upwards behind a fibrillar
of the anterior wall.

Retroversion plus Retroflexion produces
many various symptoms but three or four are fairly
constant; weakness or pain in the back, pain in the
pelvis, painful defaecation & headache. Weakness
in the back is perhaps the most common symptom
but is often replaced by pain felt about the top
of the Sacrum or in the lumbo-sacral region, often
a little lower than the pain of most other pelvic lesions (Herman's Handbook of Gynecology p 20). It is relieved by lying down & made worse by standing & movements of the body. The pain in the pelvis may amount to no more than a constant sense of weight or bearing down, or pressure, aching, or it may be more marked & tingling in character due to the stretching of adhesions & sometimes it radiates down wards to the anterior & inner aspect of the knee. Pelvic congestion is commoner than painful menstruation. The pain in the head is felt often in the occiput rather than in the vertex & may be present only at the menstrual period although in most cases it is present occasionally during the intervals between menstruation & is intensified when menstruation comes on. Other reflex symptoms may be present such as weakness or numbness of the lower limbs, all pain wherever felt is aggravated at the time of menstruation & uterine dysemenorrhea occurs if the uterine circulation has been much interfered with. Many symptoms may be present due to accompanying conditions. Thus when the ovaries are protuberant there is pain in the ovarian regions & dyspareunia; if chronic metritis is practically always present, tenesmus & menses are exceedingly common; & from
various causes abortion & sterility occur.
On physical examination the fundus is raised from the front or felt through the posterior fornix, the cervix is low & directed downwards & forwards.
When the abdominal walls are rigid rectal examination discovers the lesion may be aided by the volvella.
When it is right & necessary to use the sound it passes backwards.
Diagnoses must be made between fuses which pit on pressure; deposits in the pouch of douglas by history.
Hurling the fundus elsewhere; rectal exploration, anæsthesia & sound, enlarged poeltas or any small ovarian tumors or dilated tube by recto-abdominal examination. Sometimes the volvella, or if necessary the sound which reaches the fundus; feeling of posterior wall, by careful bimanual with sound (D'Arcot's lectures; Webster's Diseases of Women p 447).

**Proptosis Uteri** causes symptoms which vary chiefly according to the degree of displacement.
If the proptosis is slight the patient may complain of nothing but a feeling of weight or a dragging pain in the pelvis felt after being long on her feet, or doing hard work, or relieved by lying down. If the descent is more marked, along with other symptoms which are
Practically those of backward displacement, the patient often complains of a feeling of weight in the pelvis, of aching near the top of the sacrum or of pain in the inguinal region which radiates down the thighs. The pain is sometimes worse upon the left side and is always relieved by lying down and aggravated by standing, exercise, defaecation, menstruation as are all the other symptoms. When the prolapse is complete, or practically so, the patient generally complains at least of bearing down pain, of the discomfort of the tumour, &c., if it is unclear, of the pain caused by the ulcerations. The pelvic pain may be more marked, radiate down the thighs or up into the kidney region. Frequency of micturition is often a prominent symptom & there is difficulty of the descent of the bladder is marked. Sometimes there is menorrhagia, commonly leucorrhoea, nearly always sterility & not infrequently the various reflex neurological symptoms found in retroflexion may be present. Much depends upon the general health, temperament & circumstances of the patient, some women suffering less from prolapse than others from a slight displacement.

On examination, if the prolapse is incomplete the cervix may be inside the vulva or protruding from it. If complete, the whole of the enlarged uterus protrudes from the vulva in the position of retroversion &
tumour is seen covered with vaginal mucous membrane which may be excoriated or ulcerated or, if the palate is of long standing, be thickened & look like skin. The urethral orifice is seen at the base of the tumour anteriorly & the external os at its apex, the cervix being the lowest part of the protruding mass. The bladder descends into the anterior part of the tumour (Dr Barbour's Class Lectures) The uterus becomes retroverted as it prolapses. The posterior fornix is apparently deepened if the uterus has descended only partially, both fornices are obliterated if it has descended completely. Generally there is enlargement of the uterine with elongation of the supravaginal portion of the cervix.

Diagnosis must be made from hypertrophy of the cervix in which the cervix remains elongated when pushed upwards; invaginated uterine in which the cervix incircles the protrusion; fibrous polypus in which the uterine is normal in position, the cervix permits the sound to pass except at one point; cystocele by patient coughing or catheter, rectocele by finger finding rectal pouch.

**Afections of the Cervix.**

_Hypertrophy of the Vaginal Portion of the_
CERVIX gives rise to bearing down or dragging pain which is relieved by the recumbent position or to discomfort which becomes more marked on active exercise. The sitting position may produce a burning perineal pain, or pain in the anus or perineum like that due to haemorrhoids, or as if something hard were pressing on these structures or upwards on the uterus, especially when granulations or metritic coxoids (Dr. B. Hare's Translation of Country's Diseases of Women, Ovaries & Fallopian Tubes, p. 108). Irritation of the vaginal mucous membrane by the cervix sets up leucorrhoea & there may be menorrhagia, dysmenorrhoea & sterility. On examination the fornices are normal in position, the elongated cervix apparently healthy though the os may be small, retains its length when pushed upwards. A sound finds the uterine cavity elongated & the fundus not prolapsed.

Hypertrophy of the Supravaginal Portion of the Cervix is generally secondary to prolapse or its symptoms are peculiar, but since the internal os cannot be definitely located, there is no way of making sure that the uterus is not affected.

Lacerations of the Cervix give rise to no
Symptoms in themselves, those present being due to associated lesions. Thus in regard to pain, if subinvolution has been kept up it will be felt in the small of the back or the back or top of the head; if there is much erosion of the lips it will be felt in the lumbo-sacral region or in the lower dorsal, if the tear involves the broad ligament, there may be considerable pain at the seat of the tension or in the corresponding side increased by anything that causes movement of the ligament, such as exercise or motion, or there is tenderness in the fornices, the pain & tenderness being probably due to changes in the sympathetic fibres in the connective tissue (Hart’s Manual of Gynecology, p. 307). Neuralgic pain localised in the pelvis or shooting down the anterior aspect of the thigh is common. Reflex pain, as well as other reflex disturbances such as nervous dyspepsia or neuritis, is most common where there is cachexia. Neurotic pains are apt to develop as the nervous system becomes weakened. Diagnosis is made by touch or the use of the speculum or, if necessary, tenaculum.

Inflammation of the Uterus.
Cervical Catarrh, Endometritis &
Chronic Metritis give rise to very similar symptoms, all of them producing weakness or pain in the lower part of the back, this comfort or pain in the pelvis which become intensified by menstruation or exercise, disturbances of menstruation, abortion, sterility, reflex disturbances & often neurasthenic phenomena. Nevertheless the symptoms vary in some extent in relation to the site & nature of the lesion. Thus when the Cervix is affected there is often pain in the back of the neck, with large patches of erosion pain may radiate from the lumbo-sacral region up to greater part of the spinal region & there may be reflected pain in the skin fields supplied from the eleventh dorsal segment of the cord (Sherran's Handbook of Gynecology, pp. 20 & 240). Although, however, pain like menstrhagia may be present, the feature of Cervical Carcinoma is Leucorrhoea. The outstanding feature of Endometritis, on the other hand, is menstrhagia while Leucorrhoea is frequent while menstrhagia is not uncommon. When due to gonorrhoeal infection there is generally little pain; when due to septic infection there is often a burning pain behind the Symphysis pubis; when there is much congestion there is usually a burning or gnawing pain behind the Symphysis or, less frequently, in the region of the umbilicus & radiating upwards towards the ribs. Sometimes there is a girdle of pain, narrow
behind but broad in front, surrounding the lower part of the abdomen. There is generally tenderness in pressure over the utero, although it may be due to a concurrent condition. In Chronic Metritis menstruation is affected variously but there is generally menorrhagia or sometimes dysmenorrhea. Usually there is pain in the region of the uterus but not infrequently there is no pelvic pain or the region between the umbilicus or the Subcostal margin is painful. Frequently tenderness can be elicited in the body of the uterus by getting "the uterus nothing but the uterus" between the abdominal hand and the vaginal fingers and compressing it gently without causing it to move. Otherwise the tenderness may be due to a coexisting lesion.

Finally, abortion is generally symptomatic of gonorrheal infection especially in multiparae. Sterility of tubal-like infection although it may be due to a simple inflammation.

Cervical caruncle is diagnosed by touch or sight.

On examination, new glandular tissue around the OS is seen as red by red patches or Nabothen follicles as bluish red protrusions; the former are felt to be soft and velvety, the latter hard and shot like. In the case of a multipara a plug of mucous may be seen in the OS, or in that of a multipara abundant glistening secretion like white of egg about the OS, the mucous membrane of which is evened. (Mr. Barber's Lectures). The condition
must be distinguished from vaginal calculus in which the discharge is opaque and does not come from the uterine cavity, from endometritis in which the uterine cavity is elongated; or from cancer of the cervix by microscopic examination.

Endometritis is diagnosed by sounds, curettage or microscopy. In the glandular variety, the glands become more numerous and are distorted and may show little outgrowths into their lumina. In the interstitial variety, the glands become less numerous by overgrowth of fibrous tissue following round cell infiltration into the inter-glandular elements; the round cells mostly become spindle-shaped. The mixed variety is a combination of the two. The sound finds the uterine cavity elongated and may start haemorrhage but a scraping must be examined microscopically. The condition must be differentiated from adenoma sarcomata in which the glands are irregularly shaped or irregular masses of epithelial cells are seen using their way into adjacent tissues; from round cell sarcoma, in which the cells show oval nuclei; or from spindle cell sarcoma which presents typical cells in typical bundles.

Chronic metritis is diagnosed bimanually if necessary by using the sound. Examination finds the uterus symmetrically enlarged and its walls thick and soft if the disease is in the early stage or thick and hard if the
disease is in a late stage; tenderness may be elicited. The uterus may be movable or not, it is often displaced backwards. The sound discovers an enlarged cavity. Diagnosis must be made from an enlargement due to early pregnancy in which the uterus is enlarged antero-posteriorly, or from enlargement due to small fibroids by using the sound in bimanual examination.

**Fibroid Tumours of the Uterus.**

Interstitial fibroids are generally multiple, though sometimes they may only be one large tumour. The uterus becomes hypertrophied when they are present. Submucous fibroids are generally single; the uterus becomes hypertrophied as they grow, and tends to expel them. Sub-peritoneal fibroids are generally multiple but the uterus does not become hypertrophied as they develop, although it may be dragged upwards or elongated by a pedunculated tumour. All fibroids grow slowly and are subject to degenerative changes. Fibroids occur most often on the posterior wall or the fundus of the uterus, less frequently on the anterior wall and only rarely on the lateral walls. Whether they are more common in married than in unmarried women is a disputed point (Hare-Barnes's Gynaecology, p 1125), but they occur...
most commonly in women thirty-five to forty-five years of age.
The symptoms they produce are hemorhage, dysmenorrhea, pelvic discomfort or pain, symptoms due to pressure on adjacent structures, sterility & abortion. Menorrhagia is the outstanding symptom & is most marked in the case of submucous polypoid tumours, but it is usually absent in the case of subperitoneal fibroids. Menorrhagia may occur. Dysmenorrhea is often marked. The pain may be moderate in degree & coliety in character & relieved by the recumbent posture; it may be more severe & more constant & pass down into the thighs if there is a large tumour in the pelvis, or it may be more intense still & generally is most intense of all, when it is ephelant in character & the uterus is trying to expel a submucous polypoid tumour. The swelling of the tumour due to pelvic congestion at the menstrual period is in great part the cause of the pain, & an adenomyoma may give rise to much pain from the retention of its own menstrual blood. Apart from dysmenorrhea fibroids generally give rise to pelvic pain or discomfort. Occasionally when discomfort is absent, sometimes there is a feeling of weight or a dragging sensation in the pelvis most marked when the patient is standing due to the increased weight of the uterus, but as easily
when the tumour increases in size it causes pain. At
first the pain may be felt only at the menstrual period
but later, it becomes more or less continuous. It varies
in position, degree & character. Probably it is never felt
in the tumour itself till degenerative change has set in,
in which case the tumour may also be tender, but it
may be felt in the region of the uterus or seem to fill the whole
pelvis, sometimes it is referred to the sacrum or to the
back or top of the head. As a rule, a subperitoneal
tumour gives rise to less pain than one of the interstitial or
the submucous variety. A pedunculated subperitoneal
tumour may give rise to a steadily dragging pain in the
pelvis, but an interstitial tumour, though at first it
may cause only a steady ache due to stretching of the
uterine muscle, soon gives rise to spasmodic pain due
perhaps to the uterus trying to force it towards the
serous or mucous surface. Pain is most truly expulsive
in character when the tumour is a fibrous polypus or the
uterus is trying to extrude it. Along with pelvic tenderness
is generally lumbar-sacral pain. Peritoneal adhesions
are not so common as in the case of ovarian tumour but
sometimes a subperitoneal fibroid is united by adhesions
to pelvic or abdominal structures often there is added
pelvic or abdominal pain. Subperitoneal fibroids may
also cause partial torsion of the uterus which, if
Taking place quickly, gives rise to sudden intense pain, if slowly, to less severe pain gradually becoming more marked. Other complications causing pain are displacements of the uterus, displacement or inflammation of the tubes or ovaries, the endometritis, which is inflammatory or hypertrophic, which accompanies the submucous variety.

The most constant of the pressure symptoms is frequency of micturition due to pressure on the bladder, which may also give rise to cystitis. Pressure on the urethra may give rise to difficulty of micturition or retention. on the rectum to hydroraphosis, or the rectum & constipation, or mucous diarrhoea; on the pelvic veins to haemorrhoids or varicose of the legs; on the pelvic nerves to neuralgic pain in the course of the obturator, sciatic or ischial nerves which may be intense or even cause lameness.

Small fibroids are found by abdominal bimanual or abdomino-rectal examination aided by the sound which shows the size & position of the uterine cavity. If the hard elastic feeling tumour cannot be moved without moving the uterus, a submucous polypus may be felt protruding from the OS or be found inside it after dilatation. Such small tumours must be distinguished from chronic endometritis in which the uterine enlargement is uniform, from early pregnancy, in which cervix & body are soft unless
a fibroid be present; from antepartum stenosis caused by using the sound. In large fibroids there is a history of menorrhagia, of growth extending perhaps over years; the abdominal wall drops suddenly towards the epigastrium; the tumour feels firm, smooth, or nodular. If sub-peritoneal, a cough may be heard; if the uterus, steadied by rolella, is forced to move with the tumour. Large fibroids must be differentiated from ovarian tumours, in which the masses are not affected, the enlargement takes place month by month. The abdominal slope is more gradual, the tumour feels tense, no sound is heard; if the uterus does not move with the tumour; from advanced pregnancy, in which the uterus feels boggy; there are other symptoms & signs, from estro-progesterone, in which there are signs of symptoms of pregnancy. The history of a rapid growth, or perhaps symptoms of rupture of the sac, or from inflammatory deposits, by the different history, the different shape of tumour, its immobility, or by watching the case.

Cancer of the Cervix.

"The cancer curve is highest between forty & fifty, high between fifty & sixty, & fairly high between
Thirty to forty years of age, in 98 per cent of cases the disease begins in the cervix. Cervical cancer may assume one of three forms: a nodular form, a papillary form or an excavating form, the so-called inverted crater form ulcer. It usually begins as a small nodule, which, later, becomes warty; later still, ulcerates. The true cauliflower exccrescence, growing by a little stalk, is rare.

The tendency of cancer of the cervix is to involve the parametrium. Lymphatic glands, spread forwards being specially common, the bladder becoming involved in two-fifths of the cases. The growth corresponds in type of epithelium to that in which it is native, being squamous cells if growing from the vaginal portion or epidermoid cells if growing from the cervical canal or the glands opening into it. The squamous cell variety shows columns of proliferating epithelium, eating their way into the subjacent tissue, sometimes gland cells or often cell nests. There is small cell infiltration into the connective tissue. The adenocarcinoma shows spaces filled with cylindrical epithelium or small cell infiltration between the cancer cells and a well-marked stroma.

The disease produces three great symptoms—haemorrhage, discharge, and pain; these generally develop in the order named. Haemorrhage, due to the vascularity of the tumour, may begin as a slight staining of the cervix after
Retention, or constipation, or straining at stool; or there may be menorrhagia. Often menorrhagia develops early, but in the late stage bleeding is not a marked feature because the tumour tends to occlude the vessels, although perforation of a large vessel due to ulceration may occur and give rise to considerable bleeding. Hemorrhoids may be the first symptom though this is not the rule. When the cancer is of the squamous cell variety, there is often a profuse watery discharge at an early stage of the disease. The discharge becomes mixed with blood when bleeding sets in. It contains fragments of decomposing tissue when ulceration occurs and acquires its foul odour, which has been compared to that of rolling beef tea. Pain may not occur at all, when it does, it is not till the growth has spread beyond the cervix that there is anything characteristic in the symptom. It varies as to site, duration, character and degree. As in other uterine diseases it is usually felt in the lumbosacral region of the pelvis and under the breast of the affected side. It may be referred to the hypogastrum, or the groin, or the iliac crest, or the perium. It may radiate down the front or the back of the thighs, or to the coccyx, or, as has been pointed out by Champrosay's others, it may be felt on one side of the body when the disease is on the other side. It may be constant or intermittent, or become more severe at night and deprive the patient of sleep. It may be swaying or
burning, or smarting in character, or it may be shooting if nerve structures are being pressed upon, or certainly if they are being destroyed or causing muscular spasm. It may be little more than a bearing down sensation or a dull ache, or it may be agonizing if one or more of the branches of the sacral plexus have become implicated. When there is much abdominal tenderness it is due to accompanying peritonitis, but this is not common. Generally pain is intermittent; "unlike that due to inflammation, it starts in the pelvis when the patient is doing nothing & shoots down the thighs." As a rule, also, pain is more marked before breaking down takes place because the nerve endings are subjected to pressure by the new growth, but when ulceration sets in, pressure is relieved, or the nerve may be destroyed, & the pain is less acute than before. Painful micturition or painful defaecation occur when bladder or bowel are involved. Often vesico-recto-vaginal fistulae are produced; pruritus is common consequent upon the irritating discharges. General symptoms do not appear early if the patient is otherwise healthy, but sooner or later copious carmines appear. There is often anaemia due to compression of the uteri.

On examination, the vaginal finger finds the cervix thickened here there, or its tips irregular & excavated; or an irregularly shaped friable ulcerated patch, sometimes with undermined edges; or the inverted crescentiform ulcer with
hard edges; or when the finger is withdrawn, it is stained with blood and foul smelling. The uterus is fixed when the disease has spread to the fornices. Rectal examination shows the extent of the infiltration radiations.

The condition must be differentiated from hypertrophy of the cervix with nodulation, in which the nodules are multiple, papillary erosion with cicatrization, in which, if there is bleeding on examination, the bleeding is not free; syphilitic ulceration, in which the edges of an ulcer are clean cut; tuberculous ulcer, in which the edges are undermined; the base covered with caseating material or pus; there is generally no hardening; in which microscopic examination settles any doubt; small fibroids, especially polypoid, with shrinking, by their smoothness and rounded outline, or by getting up to the neck of the tumour; or, if necessary, by microscope; from Sarcoma, also by microscope.

Cancer of the Body of the Uterus.

Carcinoma of the Uterine Body forms only 2 per cent. of cases of uterine cancer. It occurs later in life than cancer of the cervix. It is nearly always primary and of the cylinder-celled variety. The growth may take the form of a small pedunculated or sessile protrusion but generally it spreads over a sur-
Siderable part of the whole of the mucous membrane is then into the muscular coat or the peritoneal tissues. The body of the uterus is generally enlarged. The microscope shows proliferation of the superficial epithelium, processes of epithelial cells forming gland-like spaces or a dense stroma of typically arborvitae appearance. The processes consist at first of cells only, but are penetrated later by fine connective tissue fibres. The glands are arranged irregularly, increased in number if superficial layers of cells are seen in their lumina. Small roundcells or polymorphs are seen in the stroma of gland spaces.

Cancer of the body of the uterus produces the same symptoms as cancer of the cervix—painful discharge or haemorrhage—but as a rule, the disease progresses more slowly, or pain occurs earlier, it is more marked, although it may be entirely absent throughout the whole course of the disease. Often the first symptom is a watery discharge which, later, becomes blood-stained or bloody. Generally, haemorrhage, whether menorrhagic or metrorrhagia is a comparatively late symptom. Haemorrhage from an enlarged uterus is suggestive after the menopause. Sometimes pain sets in before the disease has spread beyond the mucosa; sometimes not until the whole body of the uterus has become affected. It may be felt in
the pelvis, the lumbosacral region, the iliac crest, or the hypogastrum. Generally it is felt in more places than one; in the last stages, it usually extends down the thighs. At first it may be little more than a dull aching but as the disease spreads the pain increases in severity and become intense. It may be constant, it may be intermittent, or felt only when a considerable amount of discharge has been retained in the uterine cavity. Spasms of intense colicky pain are common in the advanced stage of the disease; when the peritoneum of the nerves of the sacral plexus become implicated pain is very often severe. Septic infection with consequent salpingitis, pyosalpinx, or pyometra, is more common than in cervical cancer.

On examination in the early stage the uterus is not fixed and no enlargement may be made out. At a later stage it is fixed, enlarged, its surface is irregular. Thickening and irregularities of the mucous membrane may be detected by the sound or the finger after dilatation. There is bleeding after examination. A piece of the growth should be removed or examined microscopically.

**Sarcoma.**

Sarcoma is a rare disease occurring generally between...
Thirty to forty years of age. It prefers to attack the body of the uterus rather than the cervix in which, when it occurs, it may be found growing like a squamous cell carcinoma or like a bunch of grapes. In the body it is also found in a diffuse or a circumscribed form. Round cell sarcoma attacks the mucous membrane & may occur as a sessile or a polyoid tumor or as a diffuse infiltration of the entire mucosa. The growth is soft, friable, vascular & the body of the uterus becomes enlarged as the tumor increases in size. Spindle cell sarcoma generally arises from the muscular wall as a circumscribed mass & tends so much to strangling, uterine, $\&$ various degenerative states that some pathologists maintain that it is not a true sarcoma but a sarcomatous degeneration of a fibroma. The body of the uterus becomes enlarged in proportion to the size of the tumor. Microscopic examination shows round or spindle cells with sparse or plentiful connective tissue, young blood vessels $&$ occasionally some giant cells.

The symptoms are similar to those of carcinoma - hemorrhage, prostatic discharge, pain. The discharge is then watery at first, in the case of an intramural tumor, remaining so until the submucosal cuff is involved; but whether the growth be intramural or mucosal it becomes thick & foul smelling when breaking down occurs.
Hæmolometra is not uncommon in the diffuse form. Pain is generally less marked than in cancer, but becomes severe when adhesions form or infiltration takes place. It may be very intense when the uterine cavity is filled with a hæmolometra or a large tumour or when a large growth is stretching the muscular wall.

Vaccumination finds the uterus movable or fixed, enlarged if the tumour is of any size, soft or tender if the sarcoma is diffuse. The cervical canal is often patulous. The sound discovers the tumour, which is better defined by the fingers after dilatation. The evacuation starts bleeding. Diagnosis is depended upon the result of microscopic examination.

**Deciduoma Malignum**

The tumour begins as a little gray nodule projecting from the placental site into the uterine cavity. As it grows it may acquire a pedicle. It quickly eats into the uterine muscle, destroys the endometrium, or a large part of it. It may rupture the uterine wall or distend the uterine cavity as a soft friable fungating mass which looks like placental tissue. It bleeds on the slightest touch. Metastasis are very common. The microscope shows large
Nucleated polyhedral cells or multinucleated masses of protoplasm invading the muscular or venous spaces.

The symptoms are again the same as those produced by cancer. Haemorrhage is generally the first, it may be continuous or slight but more often is intermittent or increasing in size and amount. A watery discharge is sometimes the first symptom, but it generally follows quickly upon the haemorrhage, being then either blood stained, or containing blood clot or the decomposing debris of broken down tissue or consequently foetid. Pain is generally an early symptom, felt at first as a dull ache in the pelvis or small of the back but soon becoming intenser as the disease progresses. When it becomes more marked it is very often spasmodic in character, due to the tendency to accumulation or clotting of blood in the uterine cavity so that the uterus must contract to expel it. Pain shooting down the thighs is not so common. In diagnosis the history of a tumour with haemorrhage developing soon after labour or abortion, or especially after hydatid mole, is significant, and if in addition there is early spasmodic pain the probability of decidua carcinoma is greatly increased.

On examination at a very early stage the uterus may seem normal, later it may seem somewhat enlarged and flabby, or a hard tumour, or a few hard nodules, may
be made out in its walls; later still, it may be found much enlarged or boggy with a patulous os admitting a finger which feels a friable mass, so soft that it could not be felt through the wall, t. when withdrawn, the finger is covered with blood. A portion should be removed from the margin of the tumour, for microscopic examination. It must be differentiated from a submucous fibroid, in which the growth is not easily broken down; a fibrous polypus, which is pedunculated t. not so friable; placental tissue, which can be removed more easily by microscope; t. from sarcoma t. cancer, by microscope.

Affections of the Fallopian Tubes.

Catarrhal Salpingitis.

It is difficult to say what the symptoms of Catarrhal Salpingitis are because other structures are always affected - endometrium, ovaries, peritoneum. In acute cases, however, there is feverishness, pain in the lateral flour portion of the abdomen t. perhaps, in the lower part of the back; or in the groin; t. tenderness on pressure over the region of the tubes.
In a gonorrhoeal case the pain in the tenal region is very often spasmodic or colicky in character. Pain is relieved if menstruation comes on. If peritonitis is marked, the patient may lie on her back with her legs drawn up and the tenderness is more widely spread. On the other hand there may be only slight pelvic pain with tenderness and some headache. In such a case bimanual examination will fail to find the tube only detect some tenderness in the fornices. In an ordinary case, examination finds at one side of the uterus or behind it, an extremely tender, body, firm, elastic, cylindrical, fixed here and there, traceable to the upper corner of the uterus from which it is separated by a groove. In many cases the tenderness is so great that it is necessary to wait for some time before making a bimanual examination.

Diagnosis must be made between a gonorrhoeal and a septic case. In the former the symptoms are less marked and usually delayed for months after infection; in the latter the temperature is higher, the pulse more rapid, the pain of tenderness greater, sometimes tympanites is so marked as to suggest peritonitis. There may a history of a labour or abortion almost immediately preceding the illness. In the one the patient may be confined to bed for a day or two, now here; in the other she is generally
bedridden from the beginning to the end of the attack. In the exceptional cases in which a gonorrhoeal attack follows quickly after infection there may be the usual signs in Skene’s ducts & Bartholin’s glands & cocci may be found in the discharges.

In CHRONIC cases the symptoms are pain, tenesmus, menstrual disturbances & sterility. The pain sets in down in one or both sides according as one or both tubes are affected. When only one tube is involved the pain, instead of being felt on the corresponding side may be felt in the opposite side, but this is against the rule. It is more or less constantly present & often radiating, often & hap tenesmic twinges of pain shoot down into the thighs. It may be felt as a dull ache, and occasionally, especially in the earlier stage of the disease, the pain is spasmodic & griping in character, the so-called “colica scotoctum”, which is not at all confined to the class indicated by the term but is characteristic of the disease when present. Pain of this type however, must be distinguished from that due to flatulence. As the case becomes more chronic, this colicky pain often ceases & is succeeded by a boring pain in the sacro-ilial joint. The pain of Chronic Salpingitis is lessened by lying down & intensified by standing, exercise, or anything that causes movement of the appendages. Such
as it passes on or out. The pain after ovaries often lasting an hour or two, by defecation, especially if the abdomen is adherent to the bowel, or by the congestion of the menstrual period. Painful menstruation is not unimportant. In the dysmenorrhoea of chronic salpingitis the pain is felt in the lower ovarian region and radiates through the pelvis or down the thighs. In the early stage before the abdominal oedema is thoroughly closed by adhesions the pain may be intensified by a local peritonitis due to the escape of the irritating tubal secretion, at any stage of the disease the pain is increased when an acute attack due to fresh infection from the uterus or peritoneal cavity is superadded. Then the menstruation may be profuse or prolonged. If both tubes are closed sterility results. Pain, however, is the chief symptom of the disease. In addition to the local pain the disease causes reflex pains such as pain in the corresponding breast; or neuroasthenia and chronic invalidism in consequence. The suffering may leave its mark on every line and lineament of its victim's face and show itself in her walk, carriage, in her lying down or in her rising up, in every position and every movement of the body. Being such as are calculated to prevent joining of its pelvic contents.

Biennial examination generally discovers running outwards, or outwards backwards, from the uterus.
of less diameter where it leaves the uterus, a cord-like structure, somewhat tough and torted, more or less sensitive to the exploring finger. In a gonorrheal case, the tube, as a rule, is more readily palpated than in a septic puerperal one. If on the right side it must be distinguished from an adherent vermiform appendix.

Hydrosalpinx may give rise to no symptoms or to those of chronic catarrhal salpingitis, but acute recurrent attacks are less common. Often there is a history of occasional pain since marriage, labour, or abortion. Should fluid escape pain is less marked for some time to increases as fluid reaccumulates. Manually, a tumour is distinguishable running outwards & backwards from the uterus, not very tender to pressure. Having the ovary lying on its under surface. It may be shaped like a bell, being the ovary, & being bulgy or like a banana if the tube is more distended. It feels cystic & generally less doughy than a pyo- or haematosalpinx. Erupted tenderness may be due to a diseases ovary, or the stretching of adhesions.

Acute Purulent Salpingitis. The symptoms are much the same as those due to puerperal sepsis — fever with its concurrent phenomena & cystic
pain but the pain is more severe. Bimanual examination
detects a sensitive, distended, tortuous and thickened tube.

In Chronic Purulent Salpingitis or Pyosalpinx

pain is an outstanding symptom though not always cor-
responding in intensity to the damage in the tube. A tube
distended with pus almost to bursting point may cause little
pain; but this is not generally the case. The pain has the
same characteristics as that of Chronic Calcareal Salpingitis
and usually varies in degree with the amount of distention
and the extent of the adhesions. The pain of the accompanying
dysmenorrhea is always acute. If the pain between the
periods is only a dull ache in the region of the tubes
radiating backwards down the thighs, it often changes
becomes stabbing in character as menstruation is
coming on, or just before or at the beginning of the flow
it may be so intense as to be agonizing.

Illumination usually finds the fundus above or in
front of the affected tube or tubes; sometimes two large
tumours meeting behind the uterius but separated from
each other by a groove on their lower surface. The
tumour is tender and feels tense, except in very chronic
cases, it is fairly firm, if not large, but softer towards
its outer more globular extremity. A large banana-
shaped tumour feels soft, within throughout and gives the sensa-
tion of a sac containing fluid. In the diagnosis of
purulent salpingitis or pyosalpinx, a leucocyte count of about 15,000 or less points to a gonorrhoeal origin, the count in a septic case being much higher. In an old standing case the pus may be sterile.

Haematosalpinx apart from that caused by an ectopic gestation is very rare and produces no symptoms which distinguish it from hydroosalpinx but the swelling is more often unilateral, generally more adherent, not infrequently smaller, and may impart a more resistant or doughy feeling to the examining finger.

Tuberculosis of the Tube gives rise to the same symptoms and signs as other forms of salpingitis so that its diagnosis in the female the personal history of the patient and important, to the presence of tuberculous disease elsewhere in herself or in her husband. Bimanually the tubes may be felt elongated, convoluted, or desiccated and fluctuating, and very frequently extensive adhesions are found uniting together the thickened tubes with enlarged tendinous ovaries to other pelvic structures. When tubercular peritonitis is present fine tubercles are sometimes felt on the serous surfaces of the tubes, broad ligaments or encysted fluid is of frequent occurrence, but marked enlargement of the lymphatics is more suggestive.
of malignant disease. The microscope may sometimes
detect bacilli in the vaginal discharges, but, if so, the
uterus may be involved.

Affections of the Ovaries.

Displacements.

Hernia of the Ovary is comparatively rare or
seldom gives rise to constant suffering, although it
may cause pain which is continuous or severe (Griffith
The pain may be localized or radiating; it is worst at the
menstrual period, when the ovary becomes enlarged. On
examination, pressure elicits tenderness or, if firm, often
causes a feeling of tenderness; if the ovary is masses fron
its normal position. Diagnosis is easy in an other-
wise normal adult. But may be difficult in one whose
ovary is atrophied or imperfectly developed, or likewise
in an infant; especially if the sac contains other viscera.
Omentum or lipoma, if inflamed, may be somewhat-
hardened or tender at the monthly period but impart a
different feeling to the fingers; does not give rise to a sinking
feeling when firmly pressed, & so with incipient
hydrocele of the canal of Nuck, which gives fluctuation and translucency. When the uterus is pushed over to the other side the tension on the ovarian ligament causes or increases pain in a herniated ovary.

Prolapse of Ovary may be forwards; or, occasionally, downwards into the depression of an inverted uterus; or, most commonly, backwards into one of the compartments of Douglas's pouch. If the prolapse is slight there may be no pain, but there is generally some, if the displacement is marked it is usually severe. Pain is indeed the prominent symptom of the condition. When the ovary lies in Douglas's pouch there may be very little pain, or none at all, so long as the patient is lying down, but when she stands up there is well marked pain, which is intensified with walking as the pull on the ligaments is no longer a steady one. The cervix may press the tender ovary against the sacrum. It is also increased by exercise or tight-lacing. When the ovary is very sensitive, coitus may cause extreme pain. Depravation may be painful. The passage of hardened feces may give rise to pain lasting for an hour or longer, especially if the ovary is bound down by adhesions. The pain may be described as a dragging sensation or a dull heavy aching. It may be felt in the position of the prolapsed ovary but usually is felt in the ovarian regions from which it radiates.
through the pelvis backwards towards the lumbo-sacral region or downwards to the thighs, and it is often accompanied by a feeling of nausea or faintness. On the other hand, all pain may disappear when the patient has been recumbent for some time, except perhaps at the monthly period when pain and tenderness are generally much increased. Dysmenorrhoea is often present; + submaxillary pain on the corresponding side, as well as other nervous phenomena. Examination usually discloses a swollen ovary which is extremely tender, + pressure causes a characteristic feeling of stickiness. How much of the pain is due to the prolapse, how much to the concurrent inflammation in or near the prolapse is doubtful. Webster (in Kelly + Noble's Gynecology Vol. 1 p. 66) emphasizes the fact that, in many cases, most of + indeed, all the symptoms may be due to neurasthenia; + Herman (Student's Handbook p. 82) declares that tender + prolapsed ovaries are never found except in neurasthenic women.

Ovaritis

Two varieties of Acute Ovaritis are described, paracolpial ves + intestinal, but they have no corresponding clinical distinctions. In the few cases of simple ovaritis (Hart + Bartons Gynecology p. 227) in which
The symptoms are not masked by those of a concurrent disease, there is pain, which is sometimes very severe, of the high temperature and rapid pulse of fever. The patient complains of a burning pain in the side or of a pain which radiates from the sides backwards to the lumbo-sacral region, forwards to the bladder, downwards to the thighs and knees, or perhaps, upwards towards the breasts. The pain is most intense in the left iliac fossa but is relieved if menstruation occurs. Pressure in the iliac region may cause very acute pain. On examination, which should include rectal touch, one or both ovaries are found to be very tender, perhaps, enlarged, and pressure upon them may produce a feeling of sickness.

**Chronic Ovaritis** is rare without involvement of the tube, the adjacent peritoneum, & the endometrium. It gives rise to pain aggravated on defaecation or coitus, dysmenorrhoea, menorrhagia & sterility. Of these, the outstanding & most constant symptom is pain. The patient is most comfortable in the morning, before retiring, after which comparative comfort gives place first to discomfort, then to pain in one or both iliac regions according as one or both ovaries are diseased. The pain, which is generally greater on the left side than on the right, increases as she does her daily work or takes
any kind of active exercise. The pain may radiate upwards into the breasts or downwards into the thighs. Defecation, micturition, coitus or anything which produces movement of the ovary intensifies the suffering. The pain, nagging, aching, or sawing in character between the periods is apt to take on a stabbing character with the approach of menstruation. Dysmenorrhea is common, in which the pain radiates from the ovarian region through the pelvis down the thighs.

On examination, which should include rectal touch, the ovary, though generally larger than normal may be difficult to outline satisfactorily owing to involvement of the tube or the presence of adhesions. Usually a softish mass is felt behind the cervix which is displaced forwards or in the centre of the mass, or to one side of it, a somewhat pain and enlarged ovary which is found to be adherent and tender, the tenderness being less marked than in the acute form of the disease. A small tender ovary may be cystic and or imperfectly developed but along with the former gives a history of pelvic inflammation.

Abscess of Ovary gives rise to symptoms which are practically the same as those produced by tubal or peritoneal lesions. In an acute case of septicocto
Infection the patient is suddenly prostrated and for a week or longer there may be severe pain of a throbbing or cutting character and marked tenderness in the pelvis and lower part of the abdomen, then the pain and tenderness lessen as the other acute symptoms subside, but not for a month or longer is the patient able to be out of bed. In gonorrhoeal infection the onset is generally more gradual, the pain is more restricted to the ovarian region, and the patient may not be confined to bed at all. Nevertheless an ovary which has suffered from gonorrhoeal infection may suppurate quite suddenly and cause intense pain. In chronic cases the pain is of a dull aching character and there is often a dragging sensation in the pelvis, but anything that causes a jarring of the pelvic contents gives rise to acute suffering and exacerbations of pain occur from time to time. Biannually, it may be difficult to differentiate the condition from pyosalpinx owing to adhesions but a tender mass can be felt and sometimes the rectal finger can obtain fluctuation if there is little mouting and much pus. The history is helpful in diagnosis, and in the case of tuberculous abscesses, the presence of tubercle elsewhere.

Tuberculosis of Ovary cannot be diagnosed by its symptoms or signs, which are the same as those
of non-tuberculous disease. Sometimes the condition is painless or practically so, but on the other hand it may give rise to very considerable pain; it is not improbable that some cases of ovarian pain are due to undetected tuberculosis. Diagnosis is often difficult. But if there is tubercle elsewhere, or a suspicion of it, if there has been no acute stage, or if no other cause can be found, then, since the tube is generally affected also, a microscopic examination of the vaginal discharges may be made and possibly find the bacillus.

Ovarian Haemorrhages produce symptoms which are not characteristic. When little blood is extravasated, whether into the follicles of the ovary or into its stroma, there may be little or no pain; when much, there may be dull or even acute pain in the ovarian region and pelvis generally. Biannually, the ovary is found tender and enlarged. A small ovarian tumor with torsion of the pedicle can be excluded by subsequent examination which will probably find the tumor larger. Perforation due to haemorrhage is rare, but in the case of a patient in whom no ovarian tumor can be felt, who is known to have an ovary somewhat enlarged, who complains of abdominal pain, slight rather than severe but more marked at first, who shows symptoms
of internal haemorrhage or shock, there is always the possibility of rupture of the ovary having taken place.

Ovarian Hydrocele, congenital or acquired, gives rise to symptoms which resemble those of a tubo-ovarian cyst. Examination finds a cystic tumour in the position of the ovary, or if the tube be much distended, no ovary palpable. There is a watery discharge from the vagina from time to time, perhaps preceded by pain or by exacerbations of pain, an ovarian hydrocele may be present.

Ovarian Tumours

Tumours of the ovary are diagnosed by physical examination, including, if necessary, the use of the microscope. The symptoms they produce being of practically no value for diagnostic purposes.

Carcinoma usually attacks an ovary in which there is a cystic tumour, it is most common during the first few years of puberty or after the climacteric. Pain is not a marked feature of the condition being felt rather as a sensation of much discomfort in the
pelvic floor part of the abdomen & due mostly to the chronic peritonitis which has been set up. Much more characteristic is the early appearance of ascites, followed by oedema of the lower limbs & the comparatively late appearance of cachexia. Physical examination reveals a solid or, often, cystic tumour, hard & irregular in the one case, soft & smoother in the other, or, later, infiltrating masses in the pelvis & especially in the pouch of Douglas. The microscope shows cancer cells in spaces formed by fibrous tissue.

Sarcoma may be solid or cystic. It is pedunculated, smooth of surface & preserves roughly the shape of the ovary. It is often bilateral, usually occurs in girls & young women, sometimes in elderly women, and generally causes ascites but not, as a rule, peritoneal adhesions till it has reached a large size, which, however, often happens quickly. The tumour sometimes grows as large as a man's head in a few months. Its characteristic rapidity of growth is increased by pregnancy, & cachexia appears early. Pain & tenderness do not distinguish it from an ovarian fibroid & they have between the two to make by the age incidence, the softer feeling & quicker growth of sarcoma together with the accompanying ascites, which is often blood stained, v
Cachexia. The microscope shows round or spindle cells or a mixture of the two varieties.

A Fibroid tumour of the ovary is rare but when it occurs it is generally in young women or bilateral. Sometimes it is associated with pelvic ascites. As a rule it causes no pain till it becomes large or impacted, then it gives rise to pain with the same characteristics as that caused by prolapse of the ovary. Examination finds a pedunculated tumour, very hard, shaped more or less like an ovary, connected with the uterus which is normal in size, shape and consistency. A uterine fibroid moves with the uterus; but if an ovarian fibroid is growing between the layers of the broad ligament, it may be impossible to distinguish it from a broad ligament fibroid.

**Ovarian Cysts.**

Ovarian Cysts produce no symptoms in the early stages of their growth but later give rise to symptoms which are chiefly those of pressure:—difficulty in micturition or defaecation, pain in the pelvis and down the thighs, dyspnoea, palpitation, oedema of lower limbs, vulva, etc.
lower abdominal wall; ovarian cachexia. The physical signs vary with the size of the tumour. A small ovarian cyst is a more or less rounded, tense, elastic, but not tender tumour found in the position of the ovary and apart from the uterus with which it is connected by a pedicle unless growing between the layers of the broad ligament. It usually gives fluctuation but if multifocular may feel somewhat hard. If not displaced by its own weight: the uterus is not displaced, but if prolapsed the uterus is displaced in the opposite direction which is often forwards. As it rises towards the abdomen it pushes the uterus against the bladder, which it lifts upwards, presses on the rectum.

When larger and above the pelvic brim, it pulls the underlying uterus upwards, distends the abdomen, in which it is at first lateral and later mesial in position independent of the posture of the patient, exerts pressure upon the abdominal contents, stretches the abdominal wall especially between the pubis and umbilicus, it creates in it a gradual sloping off upwards. It can be traced into the pelvis, where the uterus is retroverted except in bilateral conditions when it may be antverted; it moves apart from the uterus. It has a smooth or nodular surface. The percussion note over it is dull & around it is tympanitic. A dermoid
tumour or one which is very tense does not give
fluctuation distinctly, if at all.
A small retro-pelvic tumour must be distinguished from:
a distended bladder, by the use of the catheter; a distended
rectum, by means of a cathartic; a pregnant uterus, by
symptoms of pregnancy; a retroflexed or a fibroid uterus,
by careful examination; a dilated tube, by a different
history; serous peritonitis, by watching the case for
changes; or abscess, which is fixed and ill defined.
A large abdominal tumour must be distinguished from:
a distended bladder, by the use of the catheter; a pregnant
uterus, by foetal heart, parts and movements; hydramnios,
by more rapid growth, intermittent contractions and diffi-
cult ballottement; uterine fibroid, by slower growth.
Absence of fluctuation, mobility with uterus which is
generally enlarged, menorrhagia & doule, lymphatics,
by clear note of effect of cathartic; ascites, by diffuse
bilateral swelling, lymphatic note in front & variation
of note according to position; dense tumours, which can
be traced to kidney region & clear note in front; tumours
of liver & spleen, by different positions & relations (Dr.
Burrows' lectures).

Distinguishing Characteristics of Ovarian Cysts.
Ectoic cysts are rare & seldom so large as a walnut, but
Cause chronic pain in the region of the ovary.

Follicular cysts coalesce as they grow sometimes from a tumour the size of a small orange. They contain a clear colorless or blood stained alkaline fluid with an epithelial lining. If the ovary is enlarged, displaced or adherent there is pain of the chronic ovarian type. Both ovaries are usually affected.

A MULTilocULAR ovarian cyst has a pedicle consisting of ovarian ligament, broad ligament & Fallopian tube, which may be stretched out over its surface. It is not covered by peritoneum, is lined by cylindrical epithelium & contains a fluid, viscous colorless or colored with blood pigment, one of the constituents of which is pseudo-mucin. The cyst feels fluid if small, or semi-solid if large. Pressure symptoms appear when the tumour has reached a considerable size or is growing between the layers of the broad ligament. Pain is not a prominent symptom. Often the patient complains only of a dragging sensation in the iliac region even when the tumour is large, but pressure causes localized peritonitis with formation of adhesions so that sometimes when the tumours are comparatively small there may be, from time to time, attacks of pain lasting for a few days. Radiating reflex pains may be present.

A DERMOID cyst is generally small but varies in
Size up to that of a man's head, it usually has a pedicle consisting of ovarian and broad ligaments & Fallopian tube. It is generally unilateral & unilocular, it may contain hair, teeth & almost any other structure, even a rudimentary heart, as well as a thick, jelly-like material composed of secretion & debris from the skin which lines it. Such cysts occur at an early age, grow slowly, if, being for long in the pelvis & often injured in childbirth, are prone to suppurate. Their chief characteristic is their tendency to set up a local peritonitis so that adjacent structures become knitted up with the ovary, & there is often a history of severe attacks of pain occurring for several years. Examination may find a thick walled, non-fluctuating tumour which is very tender to pressure. Generally, an intra-peritoneal cyst other than a dermoid lies behind the uterus, but an intra-peritoneal dermoid is found as often in front of the uterus as behind it.

**Paroepithelial Cysts.**

Papillomata are generally multicellular & have a pedicle formed of ovarian & broad ligaments & Fallopian tube but very many of them burrow between the layers of the broad ligament. The cyst is rounded till it has reached some size, when the smooth surface may become irregular & show papillary outgrowths like
Those growing from the wall into the cavity of the cyst or which are characterized by tumors. It contains a fluid which may be clear or cloudy, colourless or colored with blood pigment. It ruptures easily, and the contents, escaping, infect surrounding structures, the whole pelvis being sometimes blocked up in this way. Sarcomatous and carcinomatous changes are frequent. It is generally a bilateral condition found in women between thirty and fifty years of age. Such tumors are accompanied often by severe pain in the pelvis down the thighs but more characteristically by marked cachexia. Superficial excrescences may cause crepitation by rubbing against the abdominal wall, which, if thin, may permit them to be felt, if they can generally be felt by vaginal or rectal touch. When they are not present a probable diagnosis may be made if there are small irregular tumors on both sides adherent to the pelvic floor, especially if ascites be present. (Kelly's Operative Gynecology Vol II p. 300, Ashton's Gynecology, p. 353, 354).

Complications of Ovarian Tumors

Vorsion of the Pedicle gives rise to no distinctive
symptoms of slow but may be the cause of more or less continuous or dull abdominal pain. Rapid torsion causes the tumour to enlarge rapidly to sudden, severe, or even agonizing abdominal pain more marked on one side, spasmodic in character, and varying in intensity from time to time. The patient often vomits, turns pale, or shows signs of internal haemorrhage, which may be followed by those of peritonitis. On examination of the abdomen, which is very tender to pressure, a tense rounded tumour may be made out if the abdominal wall is not too rigid. Bimanual examination finds the cervix drawn up, the uterus normal in size and independent of a tense tumour of equal consistence throughout which may or may not be movable but is extremely sensitive when a finger running between it and the broad ligament. In a patient not known to have an ovarian tumour a ruptured ectopic gestation can generally be excluded by the absence of the usual history symptoms or signs, but if doubt still remains puncture of the posterior fornix, which permits escape of blood on examination of the appendages will settle the question if thought advisable (Montgomery’s Gynecology p 604).

Haemorrhage is more common into cystic than
into solid tumours & causes no symptoms if slight, but when it puts tension on the walls of the cyst there are in addition to more or less sudden signs of internal haemorrhage, abdominal pain & tenderness over a tense tumour which, if examined before, is now found to be enlarged.

Suppurative of Ovarian Cysts causes very little pain or tenderness till peritonitis is set up when there are pain & tenderness corresponding to the peritonitis. Adhesions nearly always form between the tumour & the intestine when the pain may be very severe. Sometimes coils of adherent intestine are outlined through the abdominal wall. The pulse may remain quick & the temperature high but absence of fever is no proof that a tumour is not a suppurated cyst. (Herman’s Handbook of Gynecology pp 465).

Rupture of a Cyst causes abdominal pain which may be slight or so incipient as to cause collapse. The patient often complains of a feeling as if something had "snapped" or "burst" or "given way." Diagnosis made from the altered shape of the tumour or its disappearance. To this evidence there may be added the presence of free fluid in the peritoneal cavity, signs of internal...
bleeding, peritonitis, diuresis, or diarrhea. Should a constituent of the contents of the tumour be found in the discharges the diagnosis is certain.

Broad Ligament Tumours

A cyst derived from a vestigial tube of the peritoneum or from Gartner's duct grows between the layers of the broad ligament and is sessile unless the ligament is greatly stretched when it may possess a pedicle. It has the ovary attached to its side or the Fallopian tube stretches over the top of it. If large the mesosalpinx is thinned and the tube may be very greatly elongated. The cyst may burrow into the mesometrium or rise into the abdominal cavity. It is thin walled, usually unilocular & unicocellular & contains a clear limpid fluid, generally colorless but occasionally straw colored or having a trace of albumin. Sometimes it develops papillomatous growths on its inner surface, in which case its walls are thickened & its contents cloudy & colored by blood pigment. The condition is generally found during the years of menstrual life. As a rule it causes no pressure symptoms except in relation to the pelvic structures. Occasionally it gives rise to paroxysms of acute pain,
but generally only to a bearing down sensation or a dull ache in the pelvis which radiates in different directions, or to reflex pain such as occipital headache.

When a cyst becomes papillomatous, abdominal and thoracic symptoms may be present. Edema of the lower extremities and ascites are common.

On examination, if still in the pelvis, a tumor giving more distinct fluctuation than an ovarian cyst is formed bulging into the lateral fornix and pushing the uterus to the other side. Neither can be moved without the other. The Fallopian tube and ovary may be palpable.

If it has risen into the abdomen, a tumor which can be traced to the pelvis is found at the side of the uterus which moves along with it. The vaginal fingers find a tumor with a smooth surface bulging into the lateral fornix, displacing the uterus giving more distinct fluctuation because not so tense.

A Fibroid tumor of the Broad ligament is rare but is sometimes found in women about middle life. It gives little trouble till large enough to cause pelvic abdominal or thoracic symptoms in accordance with the structures pressed upon as, for example, retention of urine. There may be a sense of weight dragging in the pelvis; or pain in the pelvis on passing
down the thighs may be very distressing. On examination, a hard mass more or less fixed or perhaps bulging into the vagina is found pushing the uterus forwards, upwards & to the other side. A pedunculated uterine fibroid, or a fibroid of the ovary, might give the same signs; nevertheless in a patient under forty a hard rounded tumour which has the uterus in front & one side of it is probably a fibroid of the broad ligament.

Pelvic Peritonitis

The symptoms of an acute attack are rigor followed by a rise of temperature to 103° or higher, & the usual phenomena of fever, pain, nausea, & perhaps vomiting, especially if the general peritoneum is becoming involved. The pain varies in intensity according to the site & nature of the peritonitis. Thus if the appendages are involved the pain is severe, but if not, it is less severe. Thus also serous peritonitis causes less pain than fibrous & fibrous less than purulent as a rule, although when the exudate becomes mixed with pus the pain may become slighter or even cease, or when the exudation
is primarily purulent there may be no pain at all. The pain may be burning in character, or cutting, or tearing, or boring, or lancinating. It is felt in the pelvis on the affected side and radiates over the hypogastric region to downwards into one or both thighs. It is generally most severe in the early stages of the condition and thereafter it increases or decreases in severity at intervals during the course of a day, but in some cases there is scarcely any pain during the day, severe attacks of pain come on at night. The patient lies on the back with both legs drawn up. Any movement of the body brings on or intensifies the pain; defaecation is painful because the mucosa of the bowel is inflamed. There is more or less lymphadenitis, often painful or frequent micturition.

Excretion may be impossible owing to the rigidity or tenderness of the abdomen or the sensitiveness in the vaginal vault. When it can be made, a little later, a tumour may be felt above the brim giving dulness on percussion above the pubes stanchers or by the lymph of adherent intestine. The vagina is hot, probably dry, there is tenderness in one of the fornices. The uterus, ovaries, tubes are generally filled by adhesions, great pain is caused on trying to gently move them. A tense or yielding tumour formed of congested serum may be felt behind, or sometimes to one side of, the cervix or displacing a
partially fixed uterus, or forms of ecysts but where
the feeling imparted to the finger is more doughy there
is some adjacent induration. In other cases the uterus
may be quite immovable throughout the whole of the
vaginal vault a hardness may be felt which has been
taken to that of a luster of Paris.

Chronic Pelvic Peritonitis may follow acute
or be chronic from the beginning. Symptoms, with the
exception of some backache, may be absent, but generally
there is pain, dull or sharp, in the affected side of the pelvis
or in the lumbosacral region, which becomes more marked
on exercise or at the menstrual period. Other symptoms are
leucorrhoea, menorrhagia, dysmenorrhoea, painful defec-
ation, dyspareunia, sterility and various nervous pheno-
mena. On examination, which is usually painful,
the vaginal vault is found somewhat rigid, infiltrated or
flattened, the uterus and appendages are more or less ad-
herent or displaced, a swelling may be felt in the pouch
of Douglas.

Pelvic Cellulitis

The symptoms are similar to those of pelvic
peritonitis but not so marked. They never occur
without some degree of the other, it at first it is impossible to say whether the case is one of parametritis or peryometritis. In a day or two, if the clindate is fairly large and is causing pressure on the bursas, or especially if there is pus under the muscle, there is often a typical flexion of one thigh, movement of which is painful. The pain of parametritis resembles that of peryometritis except that it is less severe and, when lancinating, is confined to one thigh. On examination at first nothing can be made out except tenderness or some fulness beside the cervix, but as the clindate hardens a thickening or deposit is felt corresponding in shape and size to the portion of cellular tissue infiltrated. Most frequently the cellular tissue at the base of one of the broad ligaments is affected and a more or less conical tumour is found with its apex filling up one of the fornices, perhaps displacing the cervix, or with its base outwards or backwards. On rectal examination a mass may be felt, forming a crescent in front of and at the sides of the rectum, or the uterus-sacral ligaments may be found to be involved. In a puerperal case the swelling generally spreads upwards forwards towards the iliac crest, but in a non-puerperal case it generally spreads downwards backwards.
Pelvic Haematocoele.

If the effusion of blood is small there is sudden sharp pain in the pelvis or in the hypogastric region followed by nausea, perhaps vomiting, by symptoms of internal haemorrhage. Sometimes the pain is colicky in character, but more often perhaps, it is continuous with frequent variations in severity, or it is aggravated by movement. It lasts for some days and is apt to recur at the menstrual period. On examination when the blood has clothed a soft tender mass is found in the pouch of Douglas with its greater part on one side of the middle line or the uterus about normal in position.

With a large effusion of blood the symptoms are much more marked. The sudden pain is recumbent, there are symptoms of collapse much internal haemorrhage, the patient often vomits sometimes loses consciousness. Later there are symptoms of local or general peritonitis or of pressure. The pain is felt in the pelvis of lower part of the abdomen or at first is often of an explosive or colicky character. Later the patient may complain of pain which is rather of a rending character and rhythmically comes and goes, or of a sensation when the pain subsides from time to time, as if something were being poured into the pelvis. Later still the mass
Causes pressure on the branches of the caudal plexus & there is pain in the small of the back & lancinating pain in the lower limbs. Pressure may cause painful degeneration, painful & frequent micturition, etc. If the uterus compresses the urethra, retention of urine. As the mass of blood shrinks and becomes absorbed the pain & discomfort lessen, but pain is often felt again at the menstrual periods.

When due to a ruptured tube or tubal abortion, the sudden attack of agonizing pain may be preceded by colicky pain coming on now & then for some days or even weeks before. When the tube ruptures, or the abortion takes place, the pain at first is diffused & felt throughout the whole of the abdominal cavity, although more marked on one side. Later it becomes more localized & as a rule, it ceases in a few hours to be renewed in two or three days, or longer, when bleeding occurs. Sometimes, however, the pain does not subside in this way after the acute attack, but whether it has been colicky, as it frequently is, or colicky & rending, it loses these characters & settles down as a fixed & steady pain with no marked variation in intensity except at the menstrual periods. The pain is mostly due to the irritation of the peritoneum but may not be due to such irritation alone for a small collection of blood in the pouch of Douglas cut off by adhesions may cause as violent pain as that caused by a larger
Effusion where no adhesions are present. Dr. Eden regards pain having the characteristics described as the most reliable symptom of intra-uterine gestation (Brit. Med. Journ., April 17, 1909, p. 441).

On examination when coagulation has taken place, the abdomen is tender, distended, tympanitic, & a tender, boggy, or elastic tumour is found in the pouch of Douglas displacing the uterus forwards & upwards. The rectal finger finds some compression of the rectum. Later, if the mass is very large, it may be palpated above the rim. Later still, the mass has disappeared. The uterus is found normal in position or fixed by adhesions.

Examination of a case due to intraperitoneal rupture of a tube or tubal abortion at first finds only a fulness in the pouch of Douglas which imparts the sensation of fluid to the exploring fingers & an enlarged Fallopian tube. When the blood has clotted, a doughy tumour is felt in the pouch of Douglas and pressing upwards towards the broad part which it may be palpated with the abdominal fingers. The uterus is displaced forwards & upwards.

A Haematoma produces the same symptoms but they are less marked. It can be felt distinctly from the first at the side of the cervix or behind it, displacing the uterus in the opposite direction & fixing it. If large
t lifting up the peritoneum it may be felt above the
trigone. If the blood has passed backwards a rectal
finger may feel a crescent round the rectum.
Haematoma must be differentiated from a retroflexed
gravid uterus, in which the history is longer; it is not
posed; from pelvic peritonitis, in which the onset is not
so sudden; there are no symptoms of internal haemorrhage
the uterus is not markedly displaced; or due to
ectopic gestation, from perforation of bowel or island
penetration by different history absence of symptoms and
signs of retro-vesicovaginal pregnancy. Haematoma must
be distinguished from pelvic cellulitis, in which the
history is different; there is no acute inflammation at
first and there is greater tenderness (Dr Barlow's lectures).

Dysmenorrhoa.

Congestive Dysmenorrhoa, as a rule, gives
rise to suffering which is not great but constant. There
is a sense of weight, fullness or some throbbing pain in
the pelvis, or some aching in the pelvis, the small of the
back or the hypogastrum. Occasionally the pain is more
severe and passes from the pelvis down the groins into the
anterior and inner aspects of the thighs, it occasionally also it is
irritable in character. It comes on a day or two before
menstruation begins or ceases. When menstruation has been
well established, it is most marked for a few hours just
before or a few hours just after the flow sets in. It may con-
tinue throughout the period when peritonitis, endometritis
or other inflammatory condition is present. The pain is
lessened but not removed by lying down. The hypogastrum
may be tender. There is often rectal or vesical tenesmus, or
sometimes smarting in passing water. There is generally
a diminution in the amount of blood lost in case of
acquired congestive dysmenorrhea. In diagnosis the
relation of the pain to the appearance of the flow, its being
lessened by the recumbent posture, the character of the pain,
or a history of similar but less marked pain between
the periods, are helpful. Examination may discover
some lesion sufficient for differentiation between the
congestive, the neuralgic, the so-called obstructive and the
ovarian forms of dysmenorrhea.

Spasmodic dysmenorrhea usually, as a
rule, from puberty but sometimes comes on later. It
then, mostly, it occurs abruptly in patients between
the ages of twenty to twenty-five. The pain sets in sud-
denly and is extremely severe. Beginning with the ap-
pearance of the flow, the spasms come and go for a few
hours, seldom for longer than a day, but of their lasts about one or two minutes. In a very marked case the pain may be so intense that the patient may faint or vomit or have a convulsive seizure; profuse perspiration is common. The pain is felt in the pelvis and lower part of the abdomen but most severely in the lower part of the back and hypogastrum, and there is often aching in the thighs and suboccipital pain. Unlike the pain of congestive dysmenorrhea it is not relieved by lying down. Usually it stops rather suddenly, but when there is accompanying pelvic congestion, as happens most often in older patients, it may be followed by a continuous aching or by pain of increasing and decreasing severity till the flow is over, and in such cases the paroxysmal pain is also preceded for some days by pain of the same character. Diagnosis is made from the history of the case and the character of the pain. Examination discovers nothing abnormal.

**Obstructive Dysmenorrhea.** The theory that dysmenorrhea can be caused by a narrowing of the uterine canal obstructing the outflow of menstrual blood has many opponents for many reasons. The normal rate of blood loss during menstruation is less than a drop a minute so that an exceedingly narrow
channel is quite sufficient for its outlet. Further, when this small loss becomes established the pain usually ceases or becomes less severe. Moreover, it is extremely rare to find a case in which the sound cannot be passed easily. A patient with an external os too small to admit a sound does not generally suffer from dysmenorrhoea, while a woman with an uncomplicated flexion probably never does. Thus it has come to pass that some modification of Fritzsch's congestive theory, such as that advanced by Dr. Hart and Dr. Barbour, which already alluded to, is much more generally accepted than the obstructive theory.

The commonly named causes of obstructive dysmenorrhoea are marked flexion of the uterus, a small polypus near the internal os, acting as an imperfect valve, a fibroid distorting the uterine canal, congenital or acquired cervical stenosis, long cervical cervix with pinhole os, formation of cicatricial tissue near the internal os after amputation of the cervix, cervical carcinoma blocking the canal, congenital or acquired vaginal stenosis.

The pain comes on before the flow begins and generally lasts throughout the period. It is paroxysmal and pulsive in character and usually very severe. As blood accumulates in the uterine cavity it stimulates the
uterus to contract the pain becomes more and more intense until by a powerful effort the uterus, as if in labour, expels the blood, when the pain ceases till more blood accumulates. The pains are not so violent after several discharges of blood have taken place but subside gradually. Diagnosis is made by finding an obstruction of the nature indicated.

In Membranous Dysmenorrhoea the superficial part of the endometrium is thrown off either in one piece forming a cast of the uterine cavity or in portions which may be large or small. The pain is explosive in character & as a rule severe. It begins with the beginning of the flow, which is copious, & is felt first behind the pubes & in the hypogastric but soon spreads till it fills the whole of the lower part of the abdomen, the small of the back & the thighs are aching. After a day, or a little longer, there is a decrease in the amount of blood lost & an increase in the intensity of the pain. The flow may stop altogether the pain become almost intolerable. Generally the pain becomes more marked till the membrane is shed then it ceases the flow begins again. There is no return of the pain unless a portion of the membrane is left behind & then the cycle is repeated. When the membrane
comes away in streaks, pain may be experienced with the passage of each streak.

Diagnosis is made by finding the membrane or parts of it. When whole the membrane looks like a little triangularly-shaped bag, shows three openings corresponding to those of the uteri, when fresh, is pale pink. Naked eye examination is best made under water. The uterine surface of the membrane appears shaggy & the inner surface smooth, delicately, ridged & pitted with the orifices of the uterine glands. On microscopic examination it shows connective tissue, small round cells, gland ducts & blood vessels. It may be important to differentiate a dysmenorrheal membrane from that of a uterine pregnancy which has chorionic villi covered with the cells of Langhans' layer & syncytial masses of protoplasm, from a decidua shed during an extra-uterine pregnancy which is larger & thicker than the membrane of dysmenorrhoea & shows decidua cells. Decidual cells alone are not a proof of pregnancy, but in a doubtful case, if the patient can be kept under observation the diagnosis can be made with certainty.

In Neuralgic Dysmenorrhoea the pain usually begins before the flow ceases, when it is
established, but it may continue throughout the period
or remain for some time after it. It may or may not
be felt in the pelvis. When in the pelvis it is gener-
ally in the region of the symphysis pubis or the top of
the sacrum, or it shoots up into the abdomen and
into the thighs. It may be referred to almost any
part of the body, such as the hand or the foot, but most
often it is referred to one side of the head where it may
continue for some hours, or even a day, then shift
cross to the other side. If the patient suffers from
facial neuralgia it is often worse at the neirmcrest
period. The pain is intermittent and severe at some
times, and so excruciating that the patient becomes
hysterical. Examination finds nothing that can
account for the suffering & diagnosis is made from
the character of the pain, its relation to the flow, & finding
one of the causes which may produce the condition-
herited nervous tendency, neurasthenia, anaemia
yont, rheumatism, nervous eating habits, or bad hygi-
eic surroundings.

Ovarian dysmenorrhoea has been
badly named for menstruation does not cause
ovulation, the processes are usually asynchronous &
the symptom is most marked in cases in which tubal
disease is more pronounced than ovarian.
When there is no intermenstrual pain, the pain of
menstruation is usually a dull achy in the ovarian
region. When pain is present in the intermenstrual
period, as is most often the case, that of menstruation
is the same in kind though exaggerated in degree if,
like the intermenstrual pain, is chiefly felt in the
tubo-ovarian region or down the anterior upper
aspects of the thighs. When due to a prolapsed ovary
the pain is often of a dull dragging character. If there
is much ovarian the pain is more acute, sometimes, more
marked on the left side, Submammary pain is often
present. When tubal disease is more prominent than
ovarian, especially when it is accompanied with
distention, the pain tends to become spasmodic or
expulsive in character; in the case of pus tubes, may
be agonizing. The pain begins about three or
four days, or sometimes at a longer or shorter period,
before the flow, increases in severity till the flow is
established. Then becomes less marked. Sometimes
it stops when menstruation is well established, not
infrequently it continues throughout the period, or occa-
sionally, it remains for some days after menstruation
has ceased. Usually the greater the amount of blood
lost, the less intense is the pain.
Nervous symptoms vary greatly in degree. The patient may, perhaps, only slightly nervous, or extremely fidgety, or suffering from headache, or subject to hysterical attacks. Intermenstrual pain is often an associated symptom.

Abdominal palpation elicits tenderness in the ovarian region. Bimanual examination may cause nausea or an uncomfortable feeling in the top of the head, or exquisite pain if an enlarged congested ovary is pressed between the vaginal abdominal fingers, or it may elicit only slight tenderness when such an ovary is palpated. Often, the ovary is protruded out the pouch of Douglas; generally it is best to use a finger in the rectum by which means any abnormal condition of the appendages may be more thoroughly identified.

Conclusion.

In referring to the seats of pain, the order of County has been followed, or, in discussing some of the diseases of women, that of Dr. Barrow's Class Lectures. Certain conditions have been omitted in order to restrict the thesis to
reasonable limits. A list of books to which the
writer gladly acknowledges indebtedness will be
appended. The subject was chosen because his
reading and short experience had led him to believe
that too little heed is paid to pain. He intended
to plead in conclusion for a thorough investigation
into the characterizing or location of pain in gynec-
ological conditions, but now, at the last, it is
agreeably surprised to find that he has been fore-
stalled in a very practical way by an American
gynecologist who, in the issue of Surgery, Gynecology
& Obstetrics for December 1906, gives an account of
what he is doing in this work. Dr Philander A.
Harris of Paterson, N.J., requires his nurses to
make notes of the character, severity, continuance,
cessation or recurrence of pain in each of his
patients, to mark on his skin an area of pain,
an area of pain with a painful centre, an area of
pain with a painful centre with radiation of pain,
an area of pain with radiation of pain but no
painful centre, a painful point, a painful point
with radiation of pain, a line of pain. Investiga-
tions of this nature may take away much of the
reproach that references to gynecological
pain are generally curst and sometimes vague and
Incoherent, Dr. Harris's object is to gain knowledge respecting the location of pain. The writer has noticed that referred ovarian pain not widely spread is occasionally felt considerably nearer the umbilicus than the point mentioned in several text-books which is two inches to the inner side of the anterior superior spine of the ilium. He has several times found the painful area about two inches from the umbilicus, it repeatedly found it half way towards it on a line drawn from the anterior superior iliac spine. This is the area which Dr. Herman has generally found to be affected. In the only case of Splanchnie dysmenorrhoia observed by the writer that was referred hyperesthesia in over the skin fields corresponding to the eleventh and twelfth dorsal of first and second lumbar segments of the cord, which is the rule according to Dr. Herman (Lancet, Mar 17, 1868, p. 939). One case of retroversion plus retroflexion only out of many, shows skin tenderness in the same area.

The writer mentions Dr. Herman's name because, however presumptions it may be to differ from such an eminent gynecologist, he represents a school from whom the writer differs in regard to the
Relation of anaesthetics to certain gynaecological conditions. Dr. Herman says that prolapsed and tender ovaries are never found except in nervous women (Handbook of Gynaecology, p. 52). The writer examined a case in which the left ovary was slightly prolapsed & tender. The patient was under middle age, married with two children. Travelling across the Atlantic, she was thrown violently down when the vessel was rolling & felt sore all over but was free from pain on landing. The day after reaching her relatives she had slight ovarian pain & menstruation, which set in on the following day, was slightly painful for the first time. She was fond of long walks & trips over hilly country & after one of these slight pain might return. The writer said that probably there was nothing seriously wrong but she should see a gynaecologist. This she would not do because there was none at hand & since it was nothing serious she had no time to worry, would make the most of her remaining fortnight with her friends & see about it when she got home.

More than once in hospital & especially in private practice the writer has been impressed by the way in which a patient who complains of pain but has no lesion definable by touch is, sometimes,
immediately declared to be neurasthenic or hysterical.
From every point of view such procedure is to be con-
demned; it cannot be condemned too strongly. It is
not only that a woman in pain, or who suffers pain
occasionally, is entitled to the sympathy of the hardest
hearted humanitarian; not only that a woman's state-
ments about pain ought to be credited till they are found
to contradict anatomical fact, but also that the possi-
ibility behind pain is such that pain should always arrest
attention & arouse interest, should be forced till its cause
is found. How tremendous one's responsibility may be was
possibly instanced, the writer is inclined to believe in a case
which came under his notice very recently. It was
diagnosed by him as probably cancer of the uterine body. It
the diagnosis was confirmed or made certain. About ten
months previously the patient was examined complaining of
an aching feeling low down in the belly, it was told that
she must not imagine things. It is true that the verdict
may have been correct; but it is also true that the result
might have been different if the patient had been examined
again & again till the begininig of disease had been excluded
as far as that was, or was, possible. So one's surprise
or one's power for ill, even as for good, is sometimes seen to
be beyond one's thoughts. The Spectre of the Brocken, the
ghostly pictures by the setting sun for the traveller among
The Hardy mountains, in just the traveler's ordinary self, much to his astonishment. The writer does not mean that in his very limited experience a woman who has no detectable lesion complaints of pain is generally put down as neurasthenic or hysterical. The contrary is the case; but there should be no exception to the rule. Pain is never in itself an indication of disease which is to be relied upon but it is always worth careful investigation. It is nature's warning prompter, as Hutton used to call it; it is the cry of the suffering organ, as County said it was; it is the "grand symptom" as Matthews Duncan declared it to be.

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