SOME CLINICAL NOTES

on

CANCER OF THE FEMALE GENITAL TRACT

WITH CASES.

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The "womb" is probably the commonest seat of Primary Cancer in the human body, and as cases of the decease are undoubtedly increasing in frequency its importance can hardly be overestimated.

It is at first essentially a local process; and as, with our present knowledge, our only method of combating the disease and saving the patient's life lies in total extirpation of the new growth early diagnosis is absolutely essential to success.

The disease is moreover, so common that it is continually coming under the notice of every medical man in general practice. To obtain early diagnosis our only hope lies with the "family doctor" for it is he who sees practically every case first in the development of symptoms which rouse the patient's serious attention. By the time she seeks, or is driven to, the outpatients department of a hospital the disease is almost invariably too far advanced for successful removal. The doctor who treats symptoms without knowing their cause

must always be working on wrong lines, but the man who gives drugs to control continual atypical hemorrhage, especially in a married or elderly woman or orders douches for every discharge without making a local examination takes a great responsibility upon his shoulders, and is doing his patient an ill service.

And yet it is the general reply at hospital: "I have been under my Doctor for 3, or 6, months... No: he never examined me."

Allowance must of course be made for the susceptibilities of the woman but I believe the difficulty in persuading her to submit to examination is greatly exaggerated - She does not come to a doctor until she is persuaded that there is something really wrong and she is not generally surprised to find he has not the X-ray eye but must examine her to find out what is the matter. Some hesitation is only natural and to be expected but a little tact and firmness will probably soon overcome her dislike to the idea of being examined. In any case it is the duty of the doctor, presumedly knowing the possibilities not to waste valuable time by giving drugs. The hemorrhage, or the discharge, may not be due to Cancer, but it is due to something, it is not natural, and only local examination can determine what that something is. And it can only be quackery to give medicines

or order douches for a complaint, the nature of which is unknown to the prescriber. This is especially dangerous in a case of cancer as the onset of the disease is so insidious, and symptoms so comparatively late in appearing. In fact Cancer per se produces no symptoms whatever - with the possible exception of the watery discharge from the papillomatous varieties, which is almost invariably overlooked by the patient, and only remembered on the question being asked.

No symptom is pathognomonic of cancer. Diagnosis can only be made by local examination, - which would naturally be expected from a local disease. At best the symptoms only give an indication of what might be found, as they are common to other uterine troubles and peculiar to none. And they are of such a character and arise under such circumstances that, for a time at least, the patient explains them away to her entire satisfaction; and it is only their recurrence or persistence that compels her to seek medical advice. Vaginal discharge, backache and menorrhagia rise from many causes, and are so common, especially amongst the working classes, that little notice is taken of them until they become so bad as to prevent the woman doing her daily work. And it is amongst the working classes that cancer is most common.

As it commences so usually about the menopause, menorrhagia and metrorrhagia are set down as natural to

the "time of life". Even a haemorrhage occurring many months after the last period may not be looked upon with suspicion as serious. And as this idea is at least acquiesced in by many practitioners the patient can not be blamed for her lack of knowledge; and she is only too ready to accept a "bottle of medicine to stop the bleeding", or "a tonic to make her eat", and probably goes home greatly relieved in mind that the doctor looks upon her condition as trifling and has not thought it necessary to suggest the advisability of an examination - which is probably what she expected and what has kept her from coming sooner. A more general appreciation of the value of some knowledge of Gynecology is much needed and until it comes the percentage of inoperable cases appearing at the hospitals must remain high and the results from operation poor. The importance of discharge is not much understood by the lower classes at least as nearly all of them have suffered from it at one time or another during their life. Haemorrhage or defoecation is set down to "bleeding piles" an unskilled diagnosis which the doctor frequently accepts and for which he dispenses an ointment.

Pain as a symptom points to the disease having made considerable progress and being past the local stage.

There is a tendency to refuse to operate if the disease is advanced. This is I think a mistake.

The usefulness of the gynaecologist is not to be judged by statistics and I think that, where possible, operative measures should be taken. The patient's life will not be prolonged by more than a few months but it will be passed in some degree of comfort and she will not be a nuisance to herself and those about her. No one who has attended a patient during the last months of a case of cancer of the cervix can willingly refuse to do something to relieve the worst features of the disease, for the attendants' sake as well as for the patients. No amount of douching can relieve the stench like the removal of a cauliflower growth; or curetting a foul ulcer. And the relief of the other symptoms is equally satisfactory. Case XII was a good instance of this. The papillary growth was removed and the base curetted. In a week the patient looked very much better, she was cheerful and had lost the worried anxious look: she ate well and could sleep.

Pain too is greatly relieved by operating. Drugs may ease pain but they bring other troubles.

Death, after palliative operation, will probably result from exhaustion or anaemia and be practically painless, and all sapraemic and septicaemic troubles have been avoided, for it will now be possible to keep foetor within bounds. And this alone is a great gain both

to the patient and those surrounding her and worth the trouble of an operation.

THE MICROSCOPE IN DIAGNOSIS.

I think the use of the microscope for diagnostic purposes does not realize the expectations of the histologist. It is no doubt invaluable in some cases but clinical diagnosis is of more importance as a rule. In any cases its use is not for the general practitioner. The outlay for appliances put it out of reach of the beginner and the busy practitioner could not spare the necessary time, and cases where its use is essential to diagnosis can be left to the specialist.

Special skill and much practice and experience are required also.

When as a result of microscopic examination the histologist can positively say the tissue is cancerous it is valuable, if a clinical diagnosis has not already been made. And it is valuable in any case as confirming the clinical diagnosis.

But it is sometimes extremely difficult to say whether a specimen is cancerous or not even with the microscope in the hands of a skilled pathologist.

If the result of microscopical examination is negative valuable time may be wasted by allowing this to overrule clinical appearances and delay operation. It is of most value in doubtful cases of cancer of the body of the Uterus.

Cancer of the female genital tract can be conveniently divided into two groups, viz. (1) those which rise and run their course superficially and (2) those which infiltrate.

Any cancer may ulcerate provided it reaches the surface and is infected with pyogenic organisms.

The superficial varieties may form a papillometous tumour of varying size, or ulceration may take place early. In such cases whether a tumour is formed or not depends on whether the process of new formation is well in advance of ulceration, or whether the ulcerative process keeps pace with new formation.

The period at which ulceration commences seems to depend mainly on outside influences viz. the liability to injury and infection, and consequently varies greatly in different cases of the same type. A great deal depends on the habits and mode of life of the patient, as well as the position and mode of growth of the tumour, e.g. a cauliflower growth from the cervix is more liable to become necrosed than a villous growth in the body of the uterus. A papilloma is more liable to bleed and become infected in a woman who has heavy work to do than in one who has little. The increase in abdominal tension in lifting a weight or in straining from cough, or on defoecation in a costive woman, will cause rupture

of vessels. The jolting in running down stairs started haemorrhage in Case XII. Injury and infection will probably be earlier in a married woman (Case IX) than in a widow (Case XII).

Ulceration commences at the most dependent part, or where friction causes injury and abrasion of the surface (Case III). The superficial Flattened Ulcer of the Cervix is the exception to the general rule. In it ulceration seems to be almost coincident with the cancerous process. There is no tumour formed, and very little infiltration into the deeper tissues.

(Case [illegible].

The type originates as small nodules on the genital mucous membrane of the vulva which grow rapidly and infiltrate the surrounding tissues.

Clinically two types are met with, depending on the subsequent behaviour of the nodules, viz. (1) the Infiltrating type (Case [illegible]) and (2) the Papillomatous (Superficial) type (Case 2).

The Infiltrating Type. The nodules rise [illegible]

CARCINOMA VULVAE

is a disease of late life - rare under 40. It is as common amongst spinsters as married women. The number of pregnancies and miscarriages does not affect its incidence in any way. Chronic irritation such as sanious discharges from the vagina, accumulation of smegma round the clitharis etc. predispose. It is almost invariably preceded by a history of long-standing pruritus, a most important affection in elderly women, from whatever cause as if not relieved they may literally scratch themselves into cancer. While usually primary, cancer of the vulva may be secondary to cancer higher up the genital tract (Case 8).

The tumour originates as small raised flattened nodules on the mucous membrane of the vulva which grow rapidly and infiltrate the surrounding tissues.

Clinically two types are met with, depending on the subsequent behaviour of the nodules, viz. (1) the Infiltrating type (Case I) and (2) the Papillomatous (superficial) type (Case 2).

The Infiltrating Type. The nodules rise about the clitharis or in the vestibule and rapidly infiltrate the mucous membrane. Processes penetrate the deeper structures and the tumour soon becomes anchored to the pubic bones. Ulceration takes place very early and the ulcer spreads rapidly along the inner surface of the labia. One labium

is more involved and the process may extend back to the perineum, which also becomes infected. By implantation in fissures and scratches new foci develop on the other labium where the two come into apposition, with the formation of new areas of ulceration. These coalesce and the inner surface of both labia may be covered with ulcerating patches, which meeting at the pubis form the "horse-shoe" shaped ulcer.

The clitoris is early eaten away with the lower end of the urethra, and the whole of the mons veneris may also be destroyed, and the pubic bones may be laid bare. Destruction of the lower part of the urethra does not produce incontinence, though reflex irritability of the bladder is usual. It is the neck of the bladder, with the valvular action of the bent first part of the urethra that controls micturition in the female.

The inguinal glands are very early affected by the cancerous elements which spread into the surrounding tissues so that the glands become fixed and matted together. The skin over the glands becomes involved and open ulcers may result. These may spread and join so that a continuous ulcerating process may extend outwards along the lower border of Poupart's ligament. The ulcer may extend up into the vagina but as a rule the vaginal mucous membrane seems to resist for a considerable time.

General Appearances. The ulcer is found in the inner surface of the labia. The skin is not much involved. It is irregular in outline, with raised hard, sometimes warty, infiltrated edges, which bleed readily, and from which jagged pieces are easily broken off. The base of the ulcer and the surrounding tissues are hard and infiltrated, and livid in colour from passive congestion. The surface of the ulcer is red and nodular, and covered with necrotic material and yellow pus. There are no granulations as in a healthy sore and no attempt at healing anywhere.

Symptoms. There is great heat and burning and, especially when the clitoris is affected, itching may be ungovernable, making the patient's existence a misery. And as it is worse at night, the loss of sleep and the mental worry soon tell on the general health.

Pain is an early symptom.

The discharge is at first thin but septic infection of the ulcer is early and the discharge becomes thick and foul smelling. It is frequently blood stained from mechanical injury at first. Later severe haemorrhages, exceedingly difficult to control, may occur from erosion of one of the pudic vessels.

The disease advances rapidly, cahexia soon developes and death results from exhaustion.

Diagnosis. In cases of pruritus in elderly women a local examination should be insisted upon. The general appearance, the presence of nodules or ulceration, with extension to the glands and if necessary a histological examination settle the diagnosis.

Differential Diagnosis:- Syphilis and Lupus are the likeliest conditions to be mistaken for Cancer.

a. Syphilis. The general distinction between a syphilitic and a cancerous lesion is that while the former is a local inflammation due to a specific cause, the latter is an entirely new growth - a tumour is formed.

In the common form of primary infection the hard chancre developes in the Fossa Navicularis. The tissues there are too thin and stretched to admit of much local inflammation and in consequence the induration so characteristic of the hard sore elsewhere is absent ("Parchment Induration"). This adds greatly to the difficulty of diagnosis, but the course of the nodule soon shews what the condition really is, for while the epithelioma grows and spreads rapidly and ulcerates, the chancre remains a small nodule which neither spreads, nor shews any tendency to heal, unless treated, when it soon disappears. The chancre consists of a single nodule, not an aggregation of nodules, it is smooth on the surface and even if ulcerated, the secretion is slight. It is

hard and the centre of a local inflammation, but is felt distinct from other tissues. In the Secondary stage warty growths are common on the vulval mucous membrane, and the skin. They are multiple and other evidences of the disease e.g. rash and sore throat are present. They are not likely to be taken for epitheliona.

But it is the Tutiary lesions which it may be impossible to tell from cancerous ulceration. The history of the case, evidence of the disease elsewhere, such as nodes in the tibra or skull, or papular syphilides round the anus, inner surfaces of the thighs etc., and the reaction to treatment may distinguish the ulceration from cancer. The specific ulcer may have a firm base, and the amount of local inflammation may cause a good deal of hardening, but there are rarely papillary processes, the edges of the ulcer are not sharply defined, friable or ready to bleed on touching, and the slough is dirty yellow in colour.

And while the cancerous glands are usually adherent to the skin and break down readily and infiltrate the tissues around, the glandular enlargement in syphilis is limited to the gland itself, which is freely moveable and never ulcerates. It must of course be borne in mind that there may be a history of syphilis and specific lesions may be evident though the local condition

is really an epitheliona. In such a doubtful case specific treatment could be tried for a week or two.

Soft Chancres might if running together give rise to a serpiginous ulceration resembling cancer of this type. They are quite superficial, multiple, soft and not indurated. They are round, red and acutely inflamed and from the unhealthy looking floor a profuse purulent discharge exudes. The inguinal glands are enlarged and painful and buboes are usual. Their scattered position and evidence of autoinfection are characteristic.

Lupus: Tubercular ulceration of the vulva is exceedingly rare. It occurs occasionally in young patients with advanced Phthisis. It is not like cancer.

But the so-called Lupus, which has nothing to do with the tubercle bacillus, is sometimes exceedingly difficult to distinguish from early cancer.

It is found on the labia as bright red, raw patches, denuded of epithelium, which bleed on touching and are found in elderly women, frequently associated with Krauroesis Vulvae or urethral caruncle.

The ulceration is superficial, progresses slowly and is frequently healed in parts. There is no induration and the inguinal glands are unaffected.

Chronic Vulvitis: A considerable amount of induration about the anterior vulva may be caused by continued rubbing and scratching. And if the surface is broken and becomes infected unhealthy ulceration may result. This may happen in pruritus e.g. from urethral caruncle.

(2) The Papillomatous Type of Epitheliona of the Vulva (Case 2) is more common than the Infiltrating type.

It is confined to one labium until ulceration commences which is at a much later stage than in other variety. It commences under the mucous membrane and developes into a nodular tumour which causes little inconvenience and may reach a considerable size before advice is sought.

The whole process is more circumscribed than in the infiltrating type.

General Appearances:- On separating the labia the tumour appears as a solid firm nodular mass growing from the inner surface of the labium.

The surface is flat and nodular and covered with mucopurulent secretion and usually superficially ulcerated. If the mucous surface be wiped clear of secretion and the tumour squeezed between finger and thumb, blebs of sebaceous matter are seen at the mouths of the glands.

The tumour is wider on its surface than at its insertion so that the margins have a "rolled-over" appearance. The tumour is red in colour while the rest of the labium looks purplish and is frequently boggy from oedema.

Leucodermatous patches may be present, as in the mouth, and should be removed with the tumour, as they are liable to become malignant if left.

Symptoms. Usually the first sign to attract the patient's attention is the swelling but as it causes little trouble not much notice is taken of it.

Pruritus is always present but it has probably existed for a considerable time.

There is usually a good deal of mucopurulent discharge which becomes foul when ulceration commences. Pain is generally absent and may only amount to soreness in walking and sitting down. Free haemorrhage only occurs when considerable necrosis has taken place and a deep ulcer is formed, with foul sloughing base and edges. Cahexia is late. The tumour formation is in excess of the ulcerating process and a strong barrier is raised between the pus forming tissues and the absorbents. There is also free drainage for the slough so sapraemia does not result.

Diagnosis: Pruritus with progressive anaemia in an elderly woman raises suspicion and the diagnosis is made from the local condition.

Differential Diagnosis: Syphilis - The primary sore on the labia may be typical and is then not likely to be confounded with cancer nodules. But sometimes the specific infection causes a good deal of chronic inflammation and induration of the loose tissue of the labium which feels like a tumour (pseudoelephantiasis), the sore

itself being represented by a deep fissure down the inner side of the labium.

But examination shews that there is no new-formation present, no haemorrhage on touch. It is not friable and no sebaceous matter can be expressed from the glands.

The inguinal glands feel "shotty" and are freely moveable.

Simple Tumours of the Labia are Fibroma, and Lipoma. They are circumscribed well defined local tumours, covered with healthy mucous membrane. They are not friable, do not bleed, and do not extend to other parts. General symptoms are absent and the inguinal glands are free. They rarely ulcerate. Fibromata are frequently pedunculated.

Cysts of the Ducts of Bartholin, and abscess of the gland itself form local swellings in the labia. But fluctuation is present and they are not likely to be taken for a papilloma. They would simulate carcinoma of the glands, a very rare affection, which also gives fluctuation, and would probably not be recognized till an incision was made. An abscess of Bartholin's gland with several sinuses, or forming a deep ulcer, might easily be taken for cancer.

True Elephantiasis gives rise to a swelling from the anterior vulva. It is not a new growth but a hypertrophy of the normal tissue of the labia. The glands are not affected unless there is ulceration and septic absorption; when they may be enlarged and tender, but mobile.

The growth is not hard, nor indurated. It has a characteristic brawny feel. It is not flat but is polypoid and lobulated, with deep fissures. It is extremely rare in this country.

CARCINOMA VAGINAE,

may be either Primary or Secondary. The latter is very common; the former is not common.

I. Primary Cancer of the Vagina occurs in two forms (a) the superficial or papillary type: (b) the Infiltrating type.

The average age of occurrence is rather earlier than in other forms of cancer of the female generative organs. It has no connection with reproductive life.

(a) The Papilloma occurs as a circumscribed papillary growth usually on the upper third of the posterior vaginal wall (Case 3). It is a firm, elastic, nodular tumour, set in an indurated vase, on which it can be moved freely as its insertion is smaller than the surface of the tumour, giving it a pedunculated feel.

It is very friable and bleeds readily. It is pink in colour and is generally ulcerated at the lower end where it is liable to injury, or where it lies against the vaginal wall.

Symptoms: Pain in the sacral region, and pain on coitus followed by haemorrhage. Pain is not a marked symptom and is frequently absent. Menstruation is unaffected. Haemorrhage and floodings are uncommon.

The discharge is that of vaginitis. When ulceration sets in it becomes profuse, and foul, containing

tumour debris. Pruritus is common and the vulva may be red and eroded.

Diagnosis: From the position of the growth, and general characters. Lencoplakial patches may be found on the surface of the mucous membrane (Case 3).

Differential Diagnosis. Simple tumours may give rise to lencorrhea, lunbosacral pain and pain on coitus and if ulcerating foul discharge.

Fibroid occur occasionally, generally on the anterior wall, low down. They form hard, rounded smooth tumours, circumscribed, may be lobulated and may have a short pedicle. They are freely moveable and are covered with normal stretched mucous membrane. They are not friable, and any bleeding is slight and due to congestion of the mucous membrane. They may cause prolapse of the vaginal wall and appear at the vulva.

Occasionally they break down but the general characters are easily recognized.

Small cysts may arise at any point of the vagina, they appear as small smooth rounded swellings, pink and shining. They are fluctuant and elastic to the touch, and do not break or bleed.

Larger cysts occur from remains of the Wolffian ducts.

Cases of multiple small papillomata have been reported.

(b) The Infiltrating type of Primary Cancer of the Vagina does not form a projecting tumour, but extends rapidly along the vaginal walls in all directions and ulcerates early. It may extend directly to the vulva: and upwards to the cervix. If in a case the process is much further advanced in the vaginal walls than on the surface of the vaginal portion of the cervix, and the cervix is not much enlarged, it has probably commenced primarily in the vagina.

Case 8 is probably an example of this variety but it was too far advanced for me to be able to say where the process commenced. Rectal or bladder troubles would have been expected if it was a primary vaginal cancer but the patient's account of her symptoms was very unreliable. Examination per rectum shewed the anterior wall to be infiltrated but there were no nodules on the surface of the mucous membrane.

Differential Diagnosis. Phagdoenic ulceration may result from soft sores in an unhealthy woman. Nut it is very rare as the mucous membrane of the vagina is strongly resistant.

The ulceration is soft, with undermined edges and the whole vagina is bathed in pus. Sores are present on the vulva also. There is history of sudden onset after exposure to infection and the inguinal glands are enlarged and bubonic.

Syphilis:- Chronic syphilitic ulceration occurs. It is frequently multiple, is superficial and is covered with a greyish yellow slough. The surrounding tissues are indurated but not infiltrated and feel different to the cancerous tissue. The margins of the ulcer are flush with the mucous membrane, are not friable and do not bleed. Other evidences of syphilis are found elsewhere.

A broken down gumme may simulate a cancerous ulcer but it is exceedingly rare.

Tubercular ulcers are rare and are usually associated with tubercle in other parts. They are generally multiple, contain caseous material, are not friable and do not bleed and the margin of the ulcers is not raised and gritty.

Tubercles are found in the surrounding tissue but no general infiltration of the part.

A cystocele or Rectocele may be eroded and superficially ulcerated, and if of long standing, indurated from chronic vaginitis. But they are not likely to be confounded with cancer on examination.

SECONDARY CANCER OF THE VAGINA

is very common. It may be an extension from vulval epithelioma (Case I). The anterior wall of the vagina is a frequent site, along the line of the urethra, and may result in a Vesico-vaginal pistula. The vaginal walls are almost invariably affected in Cancer of the Cervix. Extension occurs in several ways, viz. (1) By direct extension (a) along the surface. (b) By infiltration of the loose submucosal connective tissue. Nodules are felt under the mucous membrane at points separated from the original site of the disease by healthy mucosa. These come to the surface and ulcerate. The blood supply of the intervening healthy tissues being interfered with they necrose and slough off, and a large addition to the first ulcer results.

In this way the extension of the ulceration may appear very rapid between examinations. The whole vaginal vault may appear as one large ulcer.

Infiltrating cancers in the cervix, and even body of the uterus, may track down the walls, through the fornices, into the vaginal walls.

(2) Extension may be by means of colonies. (a) When the tumour, e.g. the "cauliflower growth", comes in contact with the vaginal wall, the latter becomes infected (auto-

infection). The Secondary growths retain the histological characters of the primary tumour, so that a glandular cancer may be found in the vagina, secondary to an adenocarcinoma, originating in the cervical canal, and projecting from the external os.

(b) Or the discharges from above may contain cells which infect the vagina.

Operation wounds in the vagina have been infected in this way, or by the instruments implanting the cells in the wound. (Inplantation).

(3) By retrograde extension along the lymphatics. (Hellendall)

In all cases of vaginal cancer a careful examination, per rectum, of the other parts of the genital tract must be made. Primary vaginal cancer has been diagnosed and on operation or postmortem found to be secondary. The secondary tumour may be larger and more evident than the primary growth.

The symptoms of Secondary Cancer of the Vagina are the same as those of primary, and on examination a definite local tumour is found, or the walls may be infiltrated hard and board like, and fixed, with ulcerated patches of the usual type.

CARCINOMA UTERI.

I. Cancer of the Cervix.

A. Vaginal Portion (squamous celled)
1. Superficial type.
2. Infiltrating type.
3. Superficial flattened ulcer.

B. Supravaginal Portion. (Adenocarcinoma)
1. The superficial type.
2. Infiltrating type.

II. Cancer of the Body. (Adeno carcinoma)
1. Superficial type.
2. Infiltrating type.
3. Deciduoma Malignum.

I. CANCER OF THE CERVIX.

A. Of the Vaginal Portion. - "Cancer of the womb" - Squamous-celled Carcinoma.

This is by far the commonest site of cancer in woman. It is rare in nullipara and in some of the cases which have occurred there has been a history of instrumental interference.

It is not common in relatively sterile women, and here there is frequently a history of instrumental delivery, or large child.

The average number of pregnancies is over five, so it appears that extreme or frequent dilation of the cervix is the chief predisposing cause of the disease. The number of miscarriages do not affect the matter probably because, occurring in the early months of pregnancy, they do not stretch the tissues of the cervix much; and do not cause laceration. Though laceration is commonly found in cases of Cancer of the cervix it is doubtful if it is of so great importance as has been attached to it. Laceration is so common in porous women that the number of cases in which cancer follows is a small percentage of the whole.

Some useful information and possibly interesting results would be obtained by careful notes of the exact condition of the cervix in a large number of women at stated intervals after each labour. In any case the

cancer may arise close to but never originates from the scar, or the unhealed tear.

The menstrual history is generally normal.

The average age is between 40 and 50, usually just before or after the menopause, but cancer of the cervix may occur in young women of 25 or 30: or not commence till late in life.

It is more common amongst the lower classes.

Symptoms of Cancer of the Cervix: In almost all cases Haemorrhage is the first sign to attract the patient's attention. The menses, if present, are not altered in periodicity, but the amount of loss is greater and the duration of the flow lengthened, until, in the later stages the periods "never cease". But earlier than this intermenstrual haemorrhage usually appears. After any action which increases abdominal pressure e.g. reaching overhead, coughing, straining on deforcation etc., the patient notices a show, or it may be a fairly considerable haemorrhage. Such sudden haemorrhage is not infrequently the first sign in the papillomatous type.

Haemorrhage or deforcation is due to the passage of forces pressing on the tumour and causing rupture of the delicate vessels, in many cases.

The most characteristic haemorrhage is that after coitus and is always strongly suspicious of cancer, so

that whatever the age of the patient a local examination should be insisted upon, as the only other conditions likely to cause such a symptom are Erosion and apolypus.

The quantity lost is often not much at first, but it increases each time and may be free. Although haemorrhage is the first sign to the patient, it does not appear until some time after the cancer has commenced: and thetime and mode of onset will vary according to the type of cancer and the general mode of life of the woman. It is brought on by injury to the vessels of the tumour and consequently will shew sooner in a working woman than in one of the leisured classes. A papillomatous growth on the posterior lip of the cervix in a constipated woman will be injured earlier than a flat celled epithelioma; and in a widow early haemorrhage is not so probable as in a married woman (Case VII).

Later haemorrhages become frequent and profuse and the discharge is more or less continuously blood stained with periodic floodings.

Death from haemorrhage is uncommon.

Discharge is probably really the first symptom and is present before haemorrhage occurs, but it may be so slight as to be taken no notice of.

Typically it is at first a thin clear or opaque watery fluid, with no distinctive odour, but soon becoming

foul and sanious. (Case X). This is found usually in considerable quantity in the "cauliflower" growth, and is very characteristic. In other cases a mucopurulent discharge is first noticed, probably due to concurrent endocervicitis. It is the usual discharge in the "mushroom" variety. The discharge is increased in quantity before the periods, from pelvic congestion. When the surface of the tumour gets broken, and infected with seprophytic organisms the discharge quickly becomes foul smelling. The stage at which this occurs is very variable - early in married women, and in old women in whom the vulva is relaxed and the orifice patent from loss of fat and elasticity in the parts.

In the later stages the amount of discharge is considerable, very foul, containing blood, and small broken down blood clot and necrosed tumour debris. It is brown or greenish in colour, and may be very irritative causing erosions and excoriations on the vulva. The odour is not characteristic of cancer. It is due to the breaking down of necrosed tissues, and is found in sloughing fibroid or sloughing retained piece of placenta.

The discharge may be blood stained from the commencement (Case VI) or only become so after a considerable period (Cases V and X).

Case V had a yellow discharge of 1½ years duration

before it became foul but there was an old fibroid at the fundus of the uterus to account for it.

Pain is a late symptom, and is not in any way characteristic of cancer. It is due to extension to neighbouring structures and its character will depend on its causation. The chief and usually first pain is due to extension to the pelvic cellular tissues producing fixation of the cervix. It is of a dull boring or grinding character and is referred to the lower part of the back.

Extension to the peritoneum, producing local peritonitis, also fixes the cervix. The structures which hold the uterus in position and which normally allow free movement are thus fixed and any exertion must drag upon the inflamed parts and cause pain, usually sharp in character. The pain is also increased before the periods from congestion, and is relieved for a time, after a haemorrhage. It is probably on account of the depletion of the vessels and consequent relief of congestion that there is a remarkable absence of pain in those cases where the tumour breaks down early. Or in cases where pain has been marked as ulceration of the tumour mass advances pain becomes relieved, e.g. in Case VIII the disease was far advanced and ulceration extensive and she refused to admit pain.

Pain varies very much in different cases. It may only be backache, or it may be intense pain. The pain due to local peritonitis is never acute - it is a dull heavy pain usually felt at the lower part of the abdomen. It is associated with considerable tenderness over the lower abdomen on pressure.

The pain is generally worse at night, and like all uterine pains, is worse on the left side. Dull aching pains in the groins and thighs are due to the cellulitis. Acute darting pains to involvement of the crural and sciatic nerves. Pain in lower part of the back is due to the sensory nerves of the cervix and uterus going into the Hypogastric plexus, and as there are connecting branches to the various plexus, pain over the ovary is common.

Extension to Rectum or Bladder causes pain on defoecation and micturition. Before actual pain arises uneasy sensations in those organs are the rule.

If the cervical canal becomes blocked and pyometra results the pain is in front, paroxysmal in character.

There may be "referred" pains - inframammary, stomach, etc.

Cahexia. The group of symptoms under this heading come on gradually as the disease progresses. The loss of flesh, distaste for food, inability to rest, nervousness and

irritability of temper, and the peculiar waxy or yellow colour of the skin make up a characteristic picture. The expression of the face anxious and distressed is known as the "Cancer Facies".

Many factors enter in the production of the Cahexia. Mental worry and anxiety as to her real condition is marked. The continual pain exhausts and irritates the nervous system, and as it is frequently worse at night, there is loss of sleep. Digestive troubles are almost invariably present early - loss of appetite, distaste for food, anorexia, sometimes unaccountable vomiting, and very obstinate constipation. The cancerous process seems to set free some poison which enters the system. For the general symptoms sometimes appear early, before any destruction of tissue takes place. When ulceration sets in there is sapraemia but the amount of septic absorption is not great. The surrounding infiltration bars the entrance into the absorbents, and there is free drainage. There is frequently a slight rise of temperature, not often above 100°F. A sharp rise of temperature probably means a subacute local peritonitis or parametritis. An evening rise is probably due to septicaemia.

Progressive anaemic commences to develope early and may become very marked. The mucous membranes become pale. Haemorrhages alone do not account for this, as

it developes in cases where haemorrhages have been slight: and indeed the patient frequently picks up after a smart loss. It is a marked feature too of cancers in other parts of the body where there is no haemorrhage and no pain. The inability to sleep is also not entirely dependent on the presence of pain. The anaemic at least seems to be directly due to the cancer as it is always present, though "cahexia" may only appear in late stages of the disease.

Other symptoms are present in various cases.

Bladder symptoms - irritability, haematuria, pain etc. - or rectal troubles are most common. Oedema from pressure of cancer masses on the pelvic vessels, or cramp in the legs from pressure on nerves. Or there may be pressure on the ureters.

Diagnosis. As in all cases a diagnosis is made from local examination. The symptoms merely direct attention to the part. The speculum, if used at all, must be introduced cautiously or may produce a severe haemorrhage. Thorough cleansing of the Hand is essential. Tumours have been infected frequently by the examiner and when once the growth has become septic it is practically impossible to render it sweet again.

Three clinical types of cancer of the vaginal portion of the Cervix are met with, viz. (1) the superficial or papillomatous type (2) the infiltrating type and (3) the superficial flattened ulcer.

(1) The papillomatous type: Commences as a small nodule under the mucous membrane, on one or both lips of the cervix (Case IV). Other nodules appear and force their way to the surface and grow into the tube as long branching villous process, and form the "cauliflower mass"; (Cases V, VI, VII) which may fill the whole of the vaginal vault before discovery. In such a case the os cannot be reached by the examining finger and it is impossible to say where the tumour originated without first removing the redundant growth. It is very soft and friable and crumbles between the fingers. Friability is often not so marked when the disease commences after the menopause. (Case IV). It bleeds very readily and the examination should be made with care, disturbing the growth as little as possible, or severe haemorrhage may result. It is very vascular and dark red in colour.

There is from the commencement a considerable discharge of thin watery fluid, probably due to transudation from the processes. The discharge has no special smell at first, but soon becomes acrid and when ulceration commences the odour is very foul and penetrating. The dis-

charge may then be thin, greenish or "dirty water" colour, or may be thick and purulent, and brown from broken down blood clot and contain pieces of necrosed tissue. It may be streaked with blood, or be mainly blood.

Ulceration is usually rapid when infection occurs and the vaginal vault be filled with a rapidly sloughing irregular mass, or be occupied by a crateriform ulcer which has eaten away one or both cervical lips and is spreading over the surface of the vaginal walls. The whole of the vaginal cervix may have disappeared, especially in elderly women where natural atrophy has taken place and the cervix nearly flush with the roof of the vagina.

It is during the period of disintegration that symptoms are most marked, and it is at this stage that the case most frequently comes under observation.

Diagnosis is easy if on examination the papillomatous growth is present: or the crateriform ulcer. But it is difficult in the early stage when no tumour presents.

Differential Diagnosis. A piece of retained placente lying in ther cervical canal and protending from the external os feels like the "cauliflower" growth. But there are no processes, the cervix is normal, it is readily removed and the history of the case is definite.

It is not usually possible to differentiate between the squamous celled carcinoma of the cervix and the adeno carcinoma of the lower end of the cervical canal without a histological examination. The latter is more highly developed, the stroma of connective tissue is stronger, and it is not so vascular. Consequently it does not break down so early, is not so friable and does not bleed so freely on examination; it is not so liable to be injured, or infected so early, and there is not so much watery discharge. The most difficult condition to diagnose from early cancer is the Erosion. Friability of tissue is perhaps the most marked characteristic of cancer in any part of the genital tract. A condition which allows the probe or sound to penetrate easily, or pieces to be broken off readily with the finger nail is almost certainly cancer. And no other condition gives the peculiar gritty sensation. In old women however the tissues are not so very friable.

Two types of Erosion occur, - the follicular and the papillary - and both are liable to be mistaken for early cancer.

In the follicular variety the cervix on examination feels hard and "shotty" from blocking of the ducts of the glands with the formation of Ovula Nabothii; and there may be blood on the examining finger. But the

cervix is uniformily enlarged, it is not friable, any haemorrhage that occurs is slight. The blood vessels in the mucose of the erosion are arranged in the arborescent manner typical of the lining of the cervical canal. The cervix is never fixed and there is no extension to the vagina. On examining with the speculum the erosion is seen to be bright red in colour, the mucosa is thickened but soft and velvety to the touch, and the os is occupied by a plug of tough white mucus, which is difficult to remove. On puncturing the tubercles a small quantity of sticky sebaceous fluid escapes. Where the erosion is of long standing the cervix may be hard and indurated from inflammatory thickening, and the mucosa puckered into folds, like nodules, from contraction of the newly formed connective tissue. The point of the probe does not penetrate, and grey islets of epithelium may be seen growing into the erosion. The Erosion has a bright glistening appearance due to the epithelial covering, never ulcerates and yields readily to treatment, and has not the hard stony feel of a cancer. The early cancer is yellow pink in colour, due to areas of anaemia in the midst of the red colour or it may have a dusky nasty look.

The margin of the erosion may be irregular but it is sharply defined from the vaginal mucosa. In cancer the margin is raised, indurated and shades off into the

healthy tissue. In nullipara the erosion may surround the os, which lies in the centre of the patch. Cancer usually affects one lip of the cervix and when both are affected the process is more advanced in one. The nodules feel very hard, and give the impression of new growth. The probe penetrates the tissues and haemorrhage is free, and out of all proportion to the amount of injury done.

In the papillary variety of erosion processes project and may branch and form a small adenonatous mass ("cocks comb" variety) very like an early cauliflower growth which bleeds freely and breaks off, and may become infected and ulcerate just like the carcinoma. It is bright pink in colour, and feels smooth and soft and the cervix is not indurated. Microscopical examination is frequently necessary to differentiate the two. In this early stage the cervix can be pulled down to the vulva for examination without damaging its structure even if there is cancer. The exact condition is better appreciated by direct light than through the speculum. When cervical tears are present, as they usually are, approximation of the torn edges cause the greater part of the erosion to disappear up the cervical canal and there is a well marked endocervicical discharge. The term erosion is a misnomer as there is no loss of substance.

Fibroid Polypi: A polypus presenting through the os may bled a little on examination. But it feels firm and smooth and is seen to be covered with normal mucous membrane, and on displacing the tumour to one side the finger can reach the cervix which is normal, and the pedicle is felt coming out of the Os. If the os grips the pedicle the colour of the tumour is dark venous from passive congestion.

It is when the tumour is large and especially ulcerated or sloughing that the similarity in symptoms and touch to cancer is most marked. But if the cervix can be reached and is found normal the diagnosis is settled. Even when ulcerated the polypus is not friable, there are not papillary process, the surface where not sloughing, is smooth, and there is not much haemorrhage on examination.

Gonorrhea may produce a papillary growth on the cervix. But it is inflammatory in character, covered with creamy pus, and other evidences of the disease are present.

Condylomata are sometimes found in the cervix but they are multiple and probably present in vulva and vagina as well.

(2) The Infiltrating Type of Carcinoma of the vaginal portion of the Cervix.

One, or more frequently both, of the lips of the cervix are enlarged, thickened and hard like cartilage, and everted forming a "mushroom-shaped" growth in the vaginal vault, which bleeds readily. The discharge is micopurulent.

In this type the cancerous extension is into the substance of the cervix - not outward as in the papillomatous type. Case VIII may have originated in this way, with extension downwards. It is frequently missed in diagnosis. The Broad Ligaments are early involved.

Diagnosis: The everted and thickened lips of the cervix are felt. They blend readily and break on pressure with the peculiar gritty sensation. On examination per rectum the cervix is felt enlarged and fixed, while the uterus is normal in size and mobile. A thickened cervical lip lip in an elderly woman, which bleeds on examination is very suspicious.

Differential Diagnosis. (a) Before ulceration takes place. Hypertrophy of the Cervix. Here the increase is a simple hyperplasia and is equal all round. The enlarged cervix is firm but not hard, is freely moveable, and the fornices are normal but deep. It is not friable, does not bleed and the murosa is healthy and normal.

Deep laceration on each side of the cervix causes it to assume a mushroom shape from eversion of the lips; and it is usually thickened from continued chromic endocervicitis, with profuse yellow discharge, pain etc. But the surface of the cervix is smooth, is not friable, and bleeding is very slight, and there is pain on pressure. The lips of the cervix can be fitted together, and there is no fixation. The discharge is not acrid, nor foul and there is a history of scanty painful menstruation.

Cyst. A hard swelling of the cervix may be due to a small cyst formed by occlusion of the duct of a Nabothian follicle. It is a rounded swelling, clearly demarcated from the substance of the cervix. On puncture mucoid material escapes.

Fibroid. Or it may be a small fibroid. This is also a circumscribed tumour. It is not friable, does not bleed and has not the hard feel of a cancer nodule. Other fibroids are also usually felt.

(b) When the tumour breaks down it can be taken for nothing but Cancer.

(3) The Superficial Flattened Ulcer. (Case XI) This form differs from the papillomatous type in not forming a tumour, and from the infiltrating type by being superficial.

It is an ulcerating process from a very early stage in development. It always commences at the junction of vaginal and cervical epithelia. It looks like a granulating sore and creeps along the surface of the mucous membrane. Either of the other types may become an ulcer but in each case there is great destruction of tissue.

The superficial ulcer has well defined raised edges, bleeds readily and pieces of the ulcer can be broken off by the finger nail. The floor of the ulcer is covered with pinkish yellow granulations. A probe penetrates the tissue with a granular sensation and a sharp haemorrhage follows.

Diagnosis. A true ulcer on the cervix in a woman of any age is extremely suspicious of cancer, if not caused by the application of caustics.

Differential Diagnosis. It can only be due to cancer, Tubercle or Syphilis.

Tubercle. Primary tubercular ulcer is extremely rare. It is a well defined ulcer, with edges not raised, and with tubercular nodules in the surrounding tissues. It has not the hard gritty feel of the epithelioma, is not friable and does not bleed readily, and the floor may be covered with caseating material. The cervix is freely moveable.

Syphilis. The chancre is exceedingly rare. It appears as a small raised nodule, ulcerated in the top, the centre of a local inflammation, and covered with a greyish slough. It does not spread. A small broken down gumma appears as a round punched out ulcer, with greyish slough. It lacks the characters of the cancerous ulcer.

There may be other gummata, and history and other evidences of Syphilis.

In Prolapse of the uterus superficial ulcers of the cervix is not uncommon. They are bright red, irregular in outline, not indurated, and usually multiple.

Erosion. An ulcer due to an infected papillary erosion may require a histological examination to distinguish it from a cancerous ulcer.

II. CANCER OF THE SUPRAVAGINAL PORTION OF CERVIX - ADENOCARCINOMA.

Cancer in this site is not nearly so common as the last. It rises from the epithelium of the glands. There are two clinical types, viz. (1) the Superficial and (2) the Infiltrating. In both types in the late stages when deep ulceration has taken place the whole of the inside of the cervix may be eaten away. On examination the vaginal part of the cervix may feel hard and the external os appear normal or somewhat dilated but on introducing the finger into the cervical canal a deep hollowed out cavity is found. Extension to the Broad Ligaments is early.

(1) The Superficial Type appears first as hard nodules under the mucous membrane lining the cervical canal. These grow out from the surface and

(a) Form a soft villous mass of branching processes, the cauliflower growth. (b) Or ulceration may take place early and a superficial ulcer is formed in the cervical canal.

(a) The papillomatous type. Masses of branching papillae fill the lumen of the canal. If the tumour has originated high up, extension into the cavity of the uterus takes place. More usually it rises low down near the

external Os, and a cauliflower growth projects into the vagina. The lips of the cervix are invaded from above downwards and feel hard and thickened, but are not friable and do not tend to bleed, as in the squamous celled infiltrating type.

In the early stages the external os may be closed and then the tumour is very liable to be missed. But it is frequently patulous and the growth or ulcer as the case may be can be seen or felt.

Symptoms. A sharp haemorrhage may be the first sign but by this time the tumour has probably reached a considerable size. The discharge is at first like dirty water, and not offensive. It is not infected early as a rule so foul thick necrotic discharges appear late.

Pain is also a late symptom and is due to local peritonitis from extension. Tenderness over the lower abdomen is then usual.

Cahexia is also a late symptom.

The tumour not infrequently blocks the lumen of the cervical canal after the menopause and pyometra, with its symptoms, may be present. The accumulation in the uterus is at first mucus with epithetial debris but in time it becomes infected. Before the menopause, menstruation keeps the canal patent.

When the tumour gets infected symptoms become more marked and the progress of the disease rapid.

Diagnosis. In any case where the cervix feels hard and thickened, though not friable nor bleeding, and a foul discharge issues from the external os, a rectal examination should be made; and the os, if closed, dilated to admit the finger, or the sound passed. If the tumour rises high up the cervix may be normal but the symptoms will point to cancer of the canal or body of the uterus.

Differential Diagnosis. A dead fortus, and retained placenta must first be excluded.

Polypi. Small mucous polypi may be difficult to tell from villous processes and may require a histological examination, but they are not friable and bleeding is slight.

A larger polypus, especially if sloughing, may simulate the cauliflower growth, but it is smooth, firm, not friable and bleeding is slight; and if the tumour mass is pushed on one side the pedicle may be felt emerging from the external os. The cervix itself is normal, and freely moveable.

(b) Where ulceration is early much the same symptoms are produced.

On examination the cervix is indurated or may be normal. On passing the sound it is felt to go through the diseased tissue with a grating sensation. Or if the os is open, or dilated, an ulcer may be seen, with raised

hard irregular edges, friable and bleeding readily. If originating high up the ulcer may extend into the body of the uterus.

Diagnosis. An ulcer in the cervical canal, especially in elderly women, can only be cancerous, or in rare cases tubercular.

Differential Diagnosis. If tubercular there will probably be evidences of tubercle elsewhere. The cervix is not enlarged and hard, and is mobile. The ulcer has not raised edges, is not friable and bleeding is slight. The floor of the ulcer is covered with caseous matter. Tubercles are felt round its margins and on microscopic examination bacilli may be found, and no glandular elements.

(2) The Infiltrating Type of Cancer of the Supravaginal portion of the Cervix rises in the deep glands in the substance of the Cervix forming a hard mass. It extends downward to the vaginal portion later. On examination the Cervix feels unduly hard and enlarged out of all proportion to the size of the body of the uterus. The body is moveable, but the cervix is fixed, as extension to the Broad Ligament, which feel hard and board like, is early.

Symptoms: Symptoms are not well marked. The discharge is slight, thick and yellow. Pain is frequently the first and only symptom. Haemorrhages are slight or absent altogether. There is menorrhagia if the menopause is not past. General symptoms are late.

Diagnosis. If in an elderly woman the cervix feels hard and enlarged and a thick or blood stained discharge issues from the external os, cancer of the supravaginal portion should be looked for. And if the cervix is fixed and the Broad ligaments indurated it cam only be Cancer.

Differential Diagnosis. A fibroid in the cervix gives a firm enlarged cervix, but the characteristic hardness, like cartilage, is absent: and the mobility of the cervix is not impaired. The fibroid is a circumscribed tumour and is not likely to arise after the menopause so there is probably a history of the trouble existing for some time.

The Supravaginal portion of the Cervix may be involved from extension of primary cancer in the vaginal portion; and less often from primary cancer in the body of the Uterus.

CANCER OF THE BODY OF THE UTERUS

is much less common than Cancer of the Cervix.

It commences late in life, 50-60, and is rare before the menopause. It is more common in women of good position than amongst the poor. The number of pregnancies and miscarriages do not predispose to cancer of the body - indeed it seems to be more common in sterile or relatively sterile women, and is not uncommon in unmarried women. The disease is slow growing and causes few noticeable symptoms in the early stages. Cahexia is absent until late, though anaemia may commence early. It is not unusual for patients with uterine cancer to put on flesh and get very stout, as nutrition is not interfered with.

There are two types: (1) The papillomatous (2) The Infiltrating.

(1) The papillomatous Type usually rises at the fundus, about the openings of the Fallopian tubes. Sometimes it commences at the junction of cervix and body of the uterus.

Nodules appear on the surface, developing into branching papillae and forming a soft villous mass, of the consistency of brain tissue, very vascular and friable. It does not tend to infiltrate the walls of the uterus, but grows into the cavity, which it fills and

distends. The cervix is not involved until very late but there may be secondary implantation growths in the vagina. In rare cases where the cervix is atrophied the growth as presented in the vagina as a papillomatous mass. There is little tendency to extend to other organs.

As the tumour is protected from injury septic infection is late, but in very advanced cases the whole endometrium may be erosed down to the muscular layers. Perimetritis and paranetritis are late, so the uterus is usually mobile. Except at the commencement it is enlarged, and the muscle walls thickened. The cervix is frequently dilated from attempts on the part of the uterus to expel the new growth.

Symptoms:- Haemorrhage is usually the first symptom noticed but it is not early. It may be slight at first or less often, severe, and has a tendency to return at fairly regular intervals. In the late stages it is often very severe.

Pain of the kind found in cervical cancer is not present till late in the disease. But there is usually early pain, sometimes extremely severe, intermittent and paroxysmal in character like labour pains. It is apt to occur at regular intervals, the time between being less as the disease progresses. The pain usually ceases with the expulsion of brown discharge, containing shreds of

tissue. As the tumour begins to distend the uterus there is continuous pain of an "expanding" character, as in pyometra. Pyometra may occur when the tumour rises at the junction of cervix and body.

Discharge is usually thin and watery at first. It does not become infected as a rule until late. It may be blood stained, or brown, but not so marked as in cervical cancer. Frequently when first noticed it is thick and yellow but not foul smelling. It is sometimes the first symptom.

Remittant fever from septic absorption is commonly present when the tumour disintegrates.

Diagnosis: If a woman, five or six years past the climacteric, comes complaining of haemorrhage, or discharge, and on examination the body of the uterus is enlarged, and there is no fibroid present, it is malignant disease.

Differential Diagnosis. One of the commonest causes of continued haemorrhages, with discharge, often foul, and enlarged uterus is early miscarriage, or retained placenta. The history of the case will usually explain the cause and dilatation and curetting remove the ovum, or placenta easily.

Senile Endometritis is sometimes very difficult to diagnose from Cancer, and usually requires a histological examination. It occurs soon after the menopause. The discharge is profuse, purulent and often blood stained but severe haemorrhages are unusual. The uterus is never enlarged - it is atrophied as would be expected. But this gives no help if menstruation has not long ceased. If the cervix is dilated the surface of the endometrium is found to be smooth, there is no tumour, no villous processes or nodules or ulcer and the uterus is mobile.

In Villous Endometritis the haemorrhage is profuse and there is lencorrheal discharge and it may simulate cancer. On examination the endometrium is found more or less covered with polypoid growths, of varying size, which bleed readily. They are not friable, and do not break off. The sound does not penetrate into the uterine walls, ulceration is rare and the surface of the growths is smooth. The uterus may be somewhat enlarged, Pain is absent, and there is no extension to other organs, and no cahexia.

Tubercular Endometritis produces a thick yellow discharge; but haemorrhage is practically absent. The sound does not pass far into the diseased portion, which on examination is felt to be soft and cheesy and not friable, and there are no papillary growths. The uterus is not enlarged.

A sloughing submucous fibroid or polypus gives rise to metrorrhagia, foul discharge, "labour" pains, and an enlarged uterus. When they occur after the menopause there is a history of tumour symptoms being present for some time before the menopause. The cervix is usually soft and the finger can be inserted and will probably meet the tumour presenting. It is firm, and smooth, There are no processes and it is not friable. The examining finger usually meets the ulcerated surface, but onfurther examination a part of the tumour that is not necrosed will probably be found. And the amount of haemorrhage resulting from the manipulation is slight compared with what it would be from a cancer of the same size.

The sound, if passed, does not enter the tissues except the necrosed part, and the lumen of the cavity is found deflected to one side by the tumour mass.

In no cases does the sound pass into the substance of the uterus except malignant disease. It may pass into necrosed dead tissue as in sloughing fibroid, retained placenta (apparently) or caseous slough, but the harsh grating sensation felt as the instrument passes into the tissues is characteristic of cancer alone.

Subserous and intramural fibroids can be made out on bimanual examination, and are not likely to be confounded with villous carcinoma.

Infiltrating Type of Cancer of the Body of the Uterus rises from the deep glands, many of which normally penetrate deep into the muscular layers. It infiltrates the substance of the uterine walls and may extend into the cervix. It is very slow in growth and symptoms are not marked.

Symptoms: Haemorrhage is usually slight. It may stain the discharges or be a continual trickling.

The discharge is thick and yellow, and usually blood stained. Pain is absent until the peritoneum is affected.

Diagnosis is difficult. The above symptoms in an elderly woman, with an enlarged hard uterus and hard or normal cervix would be suspicious. Scrapings from the endometrium or examination would eliminate the various forms of endometritis, though some chronic endometritis is usually present.

In the case of Interstitial Fibroid there would be a history of long standing, and absence of general symptoms, progressive weakness etc., and no local peritonitis. And steady enlargement of the body of the uterus in late life could only be malignant.

Primary Squamous-celled Sarcinoma of the Body.

A few cases have been recorded as occurring in late life - 55 to 65. Possibly the epithelium of the endometrium tends to become flat celled.

The symptoms and diagnosis are much the same as in the usual variety, and differential diagnosis from adeno carcinoma is only made on histological examination. Haemorrhages tend to be more frequent and freer, and the discharge of watery fluid more profuse, as in the cervical cauliflower growth.

3. DECIDUOMA MALIGNUM,

originates from the epithetial covering of the chorionic villi following miscarriage, or delivery at term.

Frequently it follows birth of a mole.

It is the most malignant of all forms of cancer and spreads rapidly and early by metastasis through the circulation to all parts of the body.

As it follows conception it is always found before the climacteric - most commonly between 30 and 40.

Symptoms: Persistent free haemorrhage following delivery or miscarriage is practically the only symptom. Discharge may be present, usually after infection has taken place, when it is free and foetid. Pain is present when the growth fills the cavity of the uterus. Progressive anaemia, and weakness begin early and symptoms from secondary infection of other organs e.g. the lungs, soon appear.

Soft bluish grey nodules are commonly seen on the vulva or in the vagina. They break down between the fingers on pressure.

Pyrexia is present from an early stage. It is probably due to Septicaemia.

The uterus is enlarged as a result of the conception and the cervix soft, and readily dilated. The persistent haemorrhage raised suspicion of a piece of placenta

being left behind, and on examination masses of very soft and very vascular substance are found which dissolve on touch, and into which the finger or sound passes freely in all directions, producing profuse haemorrhage.

Diagnosis. The history of delivery (especially of a male) followed by profuse and persistent harmorrhage makes an examination of the interior of the uterus imperative.

The tumour mass is felt. Or the endometrium curetted and the scrapings examined under the microscope.

Differential Diagnosis. The early age of the patient, the history of conception and the rapid onset and course distinguish it from carcinoma.

CASE I.

R.W. A fairly well nourished woman aet. 59 years. Housewife. Complaint: Vaginal discharge of some months duration, thick, yellow, and during the last four months blood stained. Pain down the thighs and in the legs.

Menstruation commenced at 13 years, lasting 3 days, and regular every month. Ceased about 40.

She has had 5 children, the first when she was 22 years old, and the last at 36 years of age. She thinks she had one miscarriage.

"Some time" after menstruation ceased she began to have a great deal of irritation about the vulva - at least for the last 10 years.

Bowels regular - no pain.

Micturition - normal.

Examination: There is general atrophy.

The clithoris is gone and the anterior part of the vulva is occupied by an ulcer, with hard irregular raised edges extending for 1½ inches along the inner margin of the Left Labium. It is fixed to the pubis. The floor of the ulcer is covered with greenish foul smelling slough. On the Right Labium there is a superficial red ulcer, about ¼ inch long, at the junction of skin and mucous membrane. The ulcerative process extends up the anterior and left lateral walls, of the vagina nearly to the cervix.

The uterus and vagina are greatly atrophied.

Diagnosis: Carcinoma Vulva - Infiltrating Type.

Too late for operation.

for [illegible] which [illegible] piles?, [illegible] prevent[illegible] her getting [illegible] or sitting [illegible]. [illegible] the piles [illegible] down she felt in good health, her appetite was good and she got about as usual, but since [illegible] has got thinner, and cannot eat which she attributes [illegible] worry and pain and loss of sleep.

Examination. On examination she was found to have haemor[illegible] and prolapse of the lower part of the rectum which [illegible] replaced, with immediate relief. But in addition on the inner surface of the Right Labium was a raised papillo[illegible] tous mass, about 2 inches long and [illegible] inch thick, pink colour, nodular, and covered with mucopus and freely moveable in the deeper structures. On wiping off the discharge and squeezing the tumour the glands exuded sebaceous matter. It was not painful. The [illegible] not affected. The inguinal glands were slightly enlarged and hard.

The mucous membrane round the tumour [illegible] white [illegible] [illegible] leucoplakia [illegible] [illegible] The vulva was greatly atrophied, [illegible] [illegible] [illegible]

CASE II.

J. H. Retired Schoolmistress. Unmarried.

Aet. 70. A little spare woman.

Complaint: Complains of having been troubled a great deal for the last 6 weeks with "piles", which come down and prevent her getting about, or sitting in comfort. Until the piles came down she felt in good health, her appetite was good and she got about as usual, but since then she has got thinner, and cannot eat which she attributes to the worry and pain and loss of sleep.

Examination. On examination she was found to have haemorrhoids and prolapse of the lower part of the sectum which was replaced, with immediate relief. But in addition on the inner surface of the Right Labium was a raised papillomatous mass, about 2 inches long and ? inch thick, pink in colour, nodular, and covered with mucopus, and freely moveable in the deeper structures. On wiping off the discharge and squeezing the tumour the glands exuded sebacous matter. It was not painful. The clithoris was not affected. The inguinal glands were slightly enlarged and hard,

The mucous membrane round the tumour was white and sodden. There were two lencoplakial patches on the Left Labium. The vulva was greatly atrophied, the orifice admitting the index finger with difficulty. The vagina was small and unaffected.

On enquiry the patient said she first noticed the swelling about 3 months previously, but paid no attention to it as it caused no inconvenience. It has got considerably larger but she doesn't consider it of any importance.

For "many" years she has been troubled with pruritus and has "always" had a slight yellow discharge. Latterly it has been increased and smelt rather disagreeable.

Menstruation commenced about 16, and ceased about 50. Regular as to time but she always had a lot of pain before the flow started.

Appetite good till the last few weeks.

Bowels - Costive no pain.

Micturition regular. But "the water scalds her terribly".

Diagnosis. Carcinoma Vulva - Superficial Papillomatous Type.

Treatment. The tumour and inguinal glands were removed - successfully.

CASE III.

M.S. A thin anaemic looking woman, aet. 33. Housewife.

Complaint: Pain in the lower part of the back, weakness, and vaginal discharge.

Menstruation commences at 13 years lasting 7 days. She has always been irregular and had a good deal of pain.

Has had 3 children, the last 9 years ago.

No miscarriages.

Bowels - constipation. Sometimes pain on micturition.

Present Illness. About 5 years ago she began to have severe pain in the back, and some leucorrheal discharge, which has continued. It is now thick, yellow and sometimes offensive, and dark in colour.

Menstruation has been as always.

During the last 2 years her health has been bad, and she has had to lie down a good deal and rest. The discharge has been blood stained during the last year.

Examination: A tumour is felt on the posterior vaginal wall, adjacent to but not connected with the cervix. It is about the size of a grape, smooth, reddish in colour. The lower margin at its vaginal attachment is excoriated and bleeds readily.

On dilating the vagina by a Sim's speculum the vaginal wall between the tumour and the cervix is seen to have the "cat's tongue" appearance, being redder than the rest of the mucous membrane, and somewhat thickened.

There were also a few leucoplakial patches.

The cervix is atrophied and the uterus not enlarged.

Treatment: Vaginal hysterectomy with removal of 1½ inches of the posterior vaginal wall including the tumour.

CASE IV.

R.V. A somewhat pale looking woman, aged 49. Very deaf. Complains of Backache. During the last 10 years she has had to wear an instrument for "prolapse of the womb", the size of a tea cup. This was taken out a week ago as it had become uncomfortable.

She has had a thick yellow discharge for 7 weeks, which ceased on removal of the pessary.

She feels no trouble on lying down, but when she rises the womb comes down between her legs.

Examination: There was prolapse of the anterior and more especially of the posterior vaginal walls.

The cervix is nodular, one nodule well-marked posteriorly. The cervix is noded, yellowish pink in colour, very hard and bleeds readily. It is not very friable.

The uterus is small and freely moveable.

Treatment. Vaginal Hysterectomy

CASE V.

A.W. Aet. 51. A sallow complexioned, well nourished woman. Housewife.

Complaint. For two years she has lost regularly every 14 days, lasting 7 or 8 days: and has had a yellow discharge which has been worse and blood stained and foul during the last 6 months.

There has been pain for 2 years in the left Iliac region, going through to the back. It does not prevent her sleeping, but she is more restful when lying on her left side.

Her appetite is good and she is not getting thinner. She has had 3 children, the last 14 years ago.

Micturition and deforcation are normal.

Examination. A well marked papillomatous growth, rising from both lips of the cervix.

The uterus is freely moveable.

Treatment. Vaginal Hysterectomy. The uterus was difficult to turn out owing to a pedunculated fibroid springing from the fundus.

CASE VI.

M.A.W. A stout woman, aet 43. Housewife.

Complaint: During the last 3 months she has noticed a yellowish discharge. Latterly it has been getting more profuse. It has been blood tinged from the commencement. During the same time she has had pain in the back of a dragging character, worse at times. She has been getting thinner but not markedly. Appetite very good.

Bowels, always costive. No pain.

Micturition: normal.

Sexual Life. Menstruation commenced at 16, lasting 4 to 5 days, 28 days type, always regular.

She has had 6 children, the last 8 years ago.

No miscarriages.

Examination. A papillomatous growth, growing from both lips of the cervix, into the vagina, and involving the vaginal wall on the left side. The surface of the growth is covered with a greenish yellow slough with profuse discharge from it.

CASE VII.

E.C. aet 52. A fairly healthy looking woman, of spare build.

Complaint: Discharge of pus and blood of 7 months duration, with slight pain in the right iliac region "for some time". The amount of blood in the discharge has varied - sometimes only streaks, occasionally "gushes".

Sexual History. Menstruation always regular, every month, lasting 3 to 4 days, and somewhat free.

The periods ceased from November, 1903, (8 months ago). Two months later the discharge began. She thinks there was no blood at first.

She has had 2 children, the last 26 years ago. The labours were natural. No miscarriages. Has been a widow of 7 years.

She has been getting thinner during the last 6 months.

Examination: The upper part of the vagina is occupied by a soft papillomatous growth, as large as an orange. It is very friable, pieces being removed on the examining finger, and bleeds readily and freely. It arises from the upper margin of the cervical orifice externally.

The Left Broad Ligament is infiltrated. The uterus moveable and slightly enlarged.

Treatment. Vaginal Hysterectomy.

CASE VIII.

A.J.S. A stout fairly well nourished woman of 52. Housewife.

Complaint: Since menstruation ceased she has seen nothing until 6 weeks ago when she "caught cold and came on unwell again", very freely for a few hours.

She says she has never had any discharge, and never had to wear a diaper. She has now some pain about the vulva which she attributes to being examined 6 weeks ago. Since then she has had incontinence of urine but no pain in passing it. Bowels are regular.

Sexual History. Menstruation commenced at 13, regular, no pain, 28 day type, lasting 3-5 days. Ceased at 40.

Examination. The greater part of the inner surface of the left labium is occupied by a raised granular patch which breaks and bleeds readily and is covered with greenish slough.

On opening the vulva a considerable quantity of thin brownish foul smelling discharge escaped.

The whole of the anterior and posterior and left lateral and great part of right lateral walls of the vagina are hard and indurated and like boards. They bleed on touch and are ulcerated in parts.

The ulceration extends from vulva to cervix, and the upper part of the vagina is occupied by a sloughing ulcer with hard raised irregular edges involving the

cervix and extending into the cervical canal. The cervix itself is nearly all eaten away.

The patient's statements cannot be considered reliable.

Too late for anything to be done in the way of operation.

CASE IX.

E.B. A well nourished woman aet. 57. Housewife.

Complaint: Pain, followed by sharp bleeding, every time connection takes place: and as she frequently sees blood after deforcation she thinks she has got "bleeding piles". She first noticed bleeding 12 months ago but for some months previously she had the "whites", which later became thicker and yellow, and sometimes green water escaped. For the last 6 months she has had pain in the back and over the left hip and down the left thigh.

Her appetite is pretty good but variable.

Bowels regular, no pain. Micturition normal.

Sexual History. Menstruation commenced at 11 years and ceased at 38. Always regular, every 28 days, lasting 5 days. Not much pain.

Examination. The Os is replaced by an irregular crater like ulcer, involving the whole of the vaginal portion of the cervix, and larger posteriorly owing to the posterior lip being entirely eaten away and the posterior wall of the vagina is part of the ulcer. The margins of the ulcer are hard, raised and irregular: not very friable and did not bleed on examination.

The floor of the ulcer is occupied by slough, and brown debris. The uterus is fixed and slightly enlarged and the Broad Ligaments greatly infiltrated.

CASE K.

M.P. A fairly well nourished woman, aet. 44. Housewife.

Complaint. For the last 8 months has had discharge like dirty water, for some time foul smelling and latterly containing blood, with severe pain in the lower abdomen and back and over the pubis, and down into the thighs and legs. Feels thoroughly ill and depressed. Appetite poor, and has been getting thinner lately. Bowels costive, no pain. Micturition normal.

Sexual History: Menstruation commenced at 16, regular every 28 days, lasting 6-7 days, until after her one (and only) confinement, 5 years ago. No miscarriages.

Menstruation has been irregular and painful since confinement. Has been married for 18 years.

Examination. Surrounding the Os and spreading outwards over the lips of the cervix a hard irregular ulcerating mass which breaks off and bleeds easily. It extends down the anterior and posterior vaginal walls, which are hard and brittle. The general outline of the cervix is distinct, and the uterus is fixed but not enlarged.

A lot of profuse foul brown discharge escaped on examination.

CASE XI.

E.S. aet 46. A thin sallow complexioned woman.

Complaint. Yellow discharge and intermittent pain in the right iliac fossa.

Two months ago she consulted a doctor about a fluttering sensation associated with pain of an intermittent character in the Right lower abdomen of 12 months duration. She had the vaginal discharge for about 4 years before the pain. She is very uncertain about all dates. There was never blood in the discharge. The pain has been getting worse, but does not prevent her sleeping or getting about.

She has got much thinner which she attributes to worry.

Sexual history. Menstruation commenced at 16, lasting 4 days, of the 28 days type. She has had 8 children, all normal labours, and 2 miscarriages. Menstruation has been regular until 2 years ago, since when the menses have been very irregular. Sometimes every 3 weeks and sometimes with an interval of 2 months.

Appetite good. Bowels constipated. Micturition normal.

Examination. On the posterior lips of the cervix at the junction of vaginal and cervical mucosa, there is a shallow punched out ulcer, the size of a sixpenny piece.

It is granular on the surface, red, and bleeds on touch.

The uterus is freely moveable.

Diagnosis: The Superficial Malignant Ulcer.

CASE XII.

E.D. A little thin anaemic looking woman, aet. 38. Dress-maker (machinist)

Complaint: Haemorrhage, more or less continuous, of 8 months duration, with pain, continual and grinding and worse at night, over the sacrum and lower abdomen, of 5 months duration.

History of present complaint: Nine months ago she was running down stairs at business when severe flooding commenced. She was sent home, and attended to, the Doctor giving her medicine which checked the bleeding. The first haemorrhage was intermenstrual. She has been regular since but has never quite ceased seeing some bloody discharge and it has been worse lately. She has had to have medicine frequently to check it.

She had no discharge before the flooding, but has frequently had a dirty water discharge since. Latterly it has been all blood. It has never been foul smelling. She has lost flesh which she thinks is due to having no appetite and feeling sick at the thought of food. But she has been very thirsty. Bowels regular.

There is straining and uneasy sensation after micturition.

Sexual History. Menstruation commenced at 13, lasting 3 days, regular every 28 days. She was married at 26, and

has been a widow for 4 years. She has had no children and no miscarriages.

Examination. A large soft papillomatous cauliflower mass is found protruding through the external os. It is irregular in outline and sloughing on the surface. It is friable and bleeds. The walls of the cervix are hard thickened and infiltrated.

The Broad ligaments are infiltrated and the uterus fixed.

Treatment. Too late for removal.

Curetted. Adeno Carcinoma.

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