Benign &Malignant diseases of genital tract

The female reproductive system consists of-The ovaries and Secondary sex organs .
The major Organs of female genital tract are Vulva, Vagina, Cervix, Uterus, and Ovaries.

VULVA

Infective lesions of the vulva may include:
1. Bartholin's abscess. 2. Lymphogranuloma inguinale.
3. Granuloma venereum. 4. Vulval warts.

Bartholin's abscess:
This usually presents with an acute, tender, painful swelling in the posterior third of the labia. The duct may become obstructed following inflammatory invasion by bacteria (usually coliform or Neisseria gonorrhoeae), and the gland then is infected. It is an acute condition requiring emergency admission and treatment by abscess drainage. The operation to drain a Bartholin's abscess is called 'marsupialization '

Vulval warts These are STD, usually due to viral infection (condylomata acuminata).

All warts in the vagina&vulval area appear to increase rapidly in size and extent in moist conditions or during pregnancy. They are often painful, irritating or itchy and are best treated by cautery or painting with 25% podo- phyllum in tincture of benzoin.

Urethral carbuncle This is usually due to prolapse or overgrowth of the urethral mucosa. A small inflamed polypoid-like lesion is seen at the urethral introitus. It can be treated with cautery or excision.

Malignant vulval lesions :

The commonest vulval malignancy is squamous-cell carcinoma. This condition is unusual before the age of 65, and usually presents itself as an ulcerated, bleeding lesion. It is slow growing but extremely difficult to cure successfully. Even when surgery is undertaken, there is a high recurrence rate.. Other malignancies of the vulva include:

1. Melanoma, which is potentially very serious.
2. Basal-cell carcinoma.
3. Intra-epithelial carcinoma (Bowen's disease, Paget's disease).

VAGINA

There are very few pathological lesions that affect the vagina, because it is very resistant to any epithelial change.

1. A cystocoele or urethrocoele is relatively common in multiparous women. This lesion is invariably in the midline anteriorly and is easily diagnosed. .
2. Inclusion cysts may occur near the vaginal introitus following episiotomies and surgery on the vagina. They cause no problems and do not require treatment.
3. Gartner's duct cysts may be seen in the antero-lateral area of the vagina, They are generally asymptomatic and require no treatment unless very large and distorting the vagina or urethra. They are thin-walled, translucent, greyish, soft cystic swellings which should not be opened until after an IVP excludes any urinary tract connection.
4. Periurethral cysts may enlarge and protrude from the anterior wall of the vagina, simulating a urethrocoele. However, they are usually firm and cystic. They should not be incised as it may lead to a urinary fistula.

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Carcinoma of the vagina

This is relatively rare and is usually of the squamous-cell type. The treatment is generally by needles or plaques of radium implanted directly over the tumour.

THE CERVIX

The most common benign lesion of the cervix isectopic columnar epithelium. For simple ectopic columnar epithelium, the surface epithelium should be burnt using a flat cautery point, allowing normal squamous epithelium to grow back after 3-4 weeks.

Cervical Polyps

Occasionally, under the influence of oestrogen, the endocervical glands hypertrophy until the tissue is thick and polypoidal. These polyps usually develop stalks and protrude out through the cervical os .The majority are less than 0.5 cm in size, but some may grow to 5 cm in diameter. They usually cause abnormal bleeding (e.g. menorrhagia, intermenstrual bleeding or postcoital bleeding) or are occasionally associated with colicky abdominal pain (as the uterus attempts to expel the polyp). The treatment is simply to twist the polyp or cauterize its base. The polyp must be examined histologically, as about 1-3%, have evidence of neoplastic change in the base.

CARCINOMA OF THE CERVIX

This is the second most common cancer affecting females, accounting for almost 10% of neoplasia of women. The most common age for detection of carcinoma of the cervix is 45-55. It is important to be aware of the symptoms and signs of carcinoma of the cervix so that the disease may be diagnosed early and appropriate management initiated.

Factors associated with carcinoma of the cervix

1. The commonest associated factor with the development of carcinoma of the cervix appears to be the papillomavirus.

2. Intercourse. Women who have intercourse with multiple partners have a higher incidence of neoplasia than women who have infrequent or no intercourse(prostitutes have over 100 times greater risk of developing carcinoma of the cervix).
3. Childbirth appears to increase the risk of carcinoma about 5 -10 times.
4. Other viral infections such as herpes genitalis may be associated with an increased incidence of abnormal change in the cervix.
5. Early age at first and subsequent intercourse increases the risk.

The actual causative agent for carcinoma of the cervix is still un- known. However, large population studies of women in various age groups suggests that there may be a latent phase of 5-10 years, during which cervical epithelium is undergoing a change to dysplasias, carcinoma-in-situ, and finally to invasive carcinoma. If a Papanicolaou smear is taken regularly from the total squamocolumnar junction, then these changes can be identified by detecting abnormal cells with large irregular pyknotic nuclei, or even mitotic divisions, and unusual cell shape

Clinical symptoms and signs

I. Carcinoma-in-situ, because it is still intra-epithelial, usually has no presenting symptomatology.diagnosed by colposcopy .

2. Invasive carcinoma may present with symptoms, such as intermenstrual bleeding, postcoital bleeding, postmenopausal bleeding, brown or bloody discharge or occasionally (in extensive cases) bladder or bowel symptoms. However, early invasive carcinoma or carcinoma of the cndocervix may be detected only at a routine check-up, when a Papanicolaou smear suggests an abnormality and a subsequent cone biopsy proves early invasion to be present.

Diagnosis

1-history.

2-physical examination

3- Papanicolaou smear

4- punch (or knife biopsy).

5-colposcopy and biopsy.

6-cone biopsy.

7-curettage sometimes performed.

Management For squamous-cell carcinoma of the cervix

The management depends entirely on the stage of the tumour. It is ranged from simple biopsy to radical hysteroctomy with irradiation therapy.

UTERINE TUMOURS

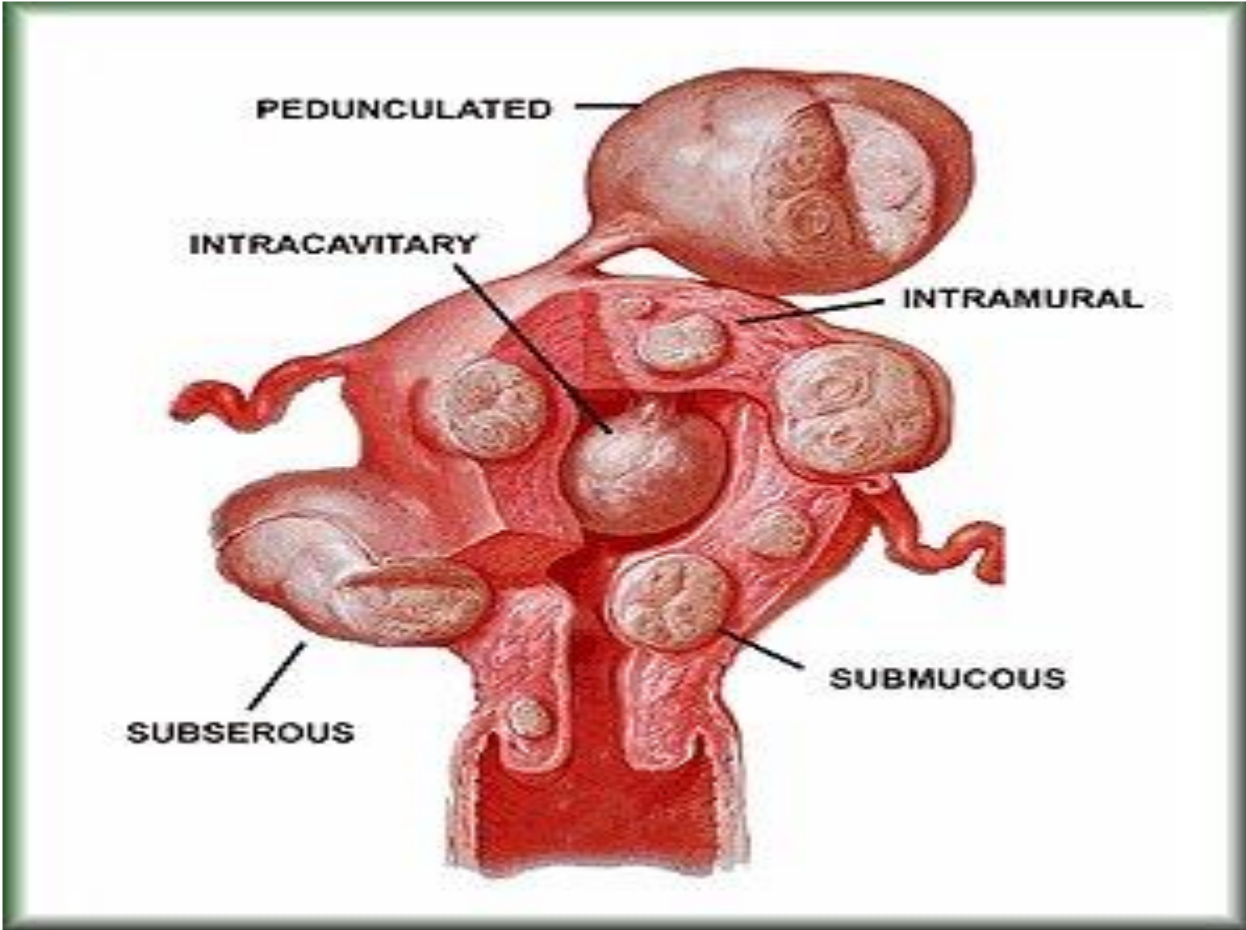
Fibromyoma(FIBROID) as the name suggests, are tumours composed of muscle and fibrous connective tissue. They are the most common type of genital tract tumour, and in about 99% of cases are associated with the uterus. They are usually hard, spherical masses that may range in size from a few millimetres up to 30 cm in diameter. They are surrounded by a pseudocapsule, consisting of compressed myometrial tissue, in which run the blood vessels that supply the tumour. It is rare to find a fibromyoma in women aged under 30; and most are detected in women aged over 35. However, in the majority of cases the tumours are relatively small and do not cause any symptoms, so no treatment is required.

The three common sites for uterine fibromyoma are:

1. Subserous. The tumour has grown and extruded to the serous surface of the uterus, forming a sessile or a pedunculated tumour covered by peritoneum.

2. Intramural. The tumour is found within the uterine musculature and apart from enlarging the uterus, produces only a localized thickening in the wall.

3. Submucous. The tumour has grown into the cavity of the uterus, the surface being covered by endometrium.


PEDUNCULATED
INTRACAVITARY
INTRAMURAL
SUBMUCOUS
SUBSEROUS

Risks factors:

-Increasing age

- Early menarch

-Low parity

- Tamoxifen use

-Obesity

- High fat diet

-Positive family history

- African racial origin

Symptoms:

1-no symptoms

2-menprrhagia.

3-pressure symptoms(e.g urinary frequency).

4-abdominal pain.

5_increased abdominal size.

Effects of Fibroid on Pregnancy

1-Infertility

2-Abortion

3-PUC

4- preterm labor

5-Abruptio placentae

6-abnormal Lie & position

7-Increase rate of operative delivery

8-PPH (uterine atony) .

Diagnosis:

Physical examination – Internal examination

Palpation of an enlarged, firm, irregular uterus

Ultrasonography

Hysteroscopy

hystrosalpingiography

CT Scan or MRI

Management:

Observation – for small and asymptomatic

Operative:

Myomectomy

Hysterectomy

Medical:

- Danazol _GnRH agonists
- RU 486 _Medroxyprogesterone acetate

-Uterine artery embolization

Other uterine tumours are:

1-Endometriosis

2-Adenomyosis.

CARCINOMA OF THE the Endometrium

Carcinoma of the endometrium commonly affects postmenopausal women, the average age of presentation being in the early 60s.it is called adenocarcinoma .

Aetiology Although the cause for carcinoma of the uterus Is not known, a number of associated factors have been noted:

I. Late menopause. Women who menstruate beyond the age of 50 have a higher incidence of carcinoma of the endometrium than women who reach the menopause earlier. Prolonged exhibition of hormones, especially oestrogen, may play a part.

2. Relative infertility. Women who have a long history of infertility have a higher incidence of neoplasia. Again, anovulation and un-opposed oestrogen are thought to be factors.

3. Dysfunctional uterine haemorrhage due to oestrogen influence or anovulation is also implicated.

4. Feminizing tumours of the ovary such as granulosa and theca-cell tumours are associated with a higher incidence of carcinoma of the endometrium.

5. Recent evidence suggests that exogenous oestrogen given for post- menopausal symptoms is also associated with an increased (2-3 times greater) incidence of neoplasia of the uterus. Other factors such as race, parity, diabetes and hypertention are suggested riak factors.

Symptoms of Endometrial Cancer

Abnormal vaginal bleeding unusually heavy irregular menstrual periods or bleeding between periods orpostmenopausal bleeding.

Vaginal discharge that may range from pink and watery to thick, brown, and foul smelling.

Difficult or painful urination.

An enlarged uterus, detectable during a pelvic exam.

Pain during intercourse.

Unexpected weight loss.

Weakness and pain in the lower abdomen, back, or legs. This happens when the cancer has spread to other organs.

Diagnosis

The diagnosis is made by examining tissue obtained by curettage for evidence of histological neoplasia, and the staging of the disease is made by clinical examination and chest X-ray (cystoscopy and proctos- copy, if advanced).

Management

The basic management depends on several factors:

1. Age&medically fit.
2. Stage of the disease. Early diagnosis and early staging allow more curative management to be undertaken.
3. Availability of appropriate therapy.

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The treatment of uterine cancer:

1-surgery

2-radiotherapy

3-hormonal therapy

Ovaries

Benign ovarian tumours:

Physiological ovarian cyst

Mucinous ovarian cysts

Serous cystadenomas of the ovary

Dermoid cysts make up about 25% of all ovarian tumours

OVARIAN MALIGNANCY

The common malignant ovarian tumours are

serous cystadenocarcinomas,

mucinous cystadenocarcinomas,

secondary ovarian carcinoma.

Malignant tumours of the ovary usually have a very poor prognosis because they are not detected until very late in the course of the disease.

Clinical features of ovarian tumours Ovarian tumours are notoriously difficult to diagnose early in their course, and they are usually detected when a patient presents for a routine check-up. However, they do have some symptoms and signs that are important indications of a potential tumour.

Symptoms and signs

1. Vaginal bleeding. Postmenopausal women often have an episode of postmenopausal bleeding when an ovarian tumour is present.

2. Ascites. A number of tumours of the ovary produce an increase in irritation of the peritoneum and thus produce an increase in ascitic fluid.

3. Pain. If a cyst undergoes torsion or a vessel bleeds into the cyst, then moderate to severe pain may be experienced.

4. Abdominal swelling, nausea, vomiting and cachexia. These are found when the tumour produces metastases to the bowel, the diaphragm or the omentum.

5. Urinary frequency. This is a common symptom when the tumour is large enough to encroach on the capacity of the bladder.

Management of ovarian tumours

In the reproductive phase, women presenting with an ovarian tumour that is less than 5 cm in diameter should have the mass rechecked after one month. Physiological tumours usually regress during this time. If the mass persists, is greater than 5 cm in size or is found in postmenopausal women, then a laparotomy should be performed to remove the tumour. Surgery should be followed by a course of chemotherapy in amalignant tumour