

GYNECOLOGICAL CASE TAKING

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GYNECOLOGICAL CASE TAKING

DIFFERENTIAL DIAGNOSIS OF GYNECOLOGICAL COMPLAINTS

THE MAIN 5 GYNECOLOGIC COMPLAINTS

1. **PAIN**
2. **MENSTRUAL ABNORMALITY (BLEEDING)**
3. **DISCHARGE**
4. **MASS (SWELLING)**
5. **INFERTILITY**

GYNECOLOGICAL PAIN/ CHARACTER

PAIN TYPE	COMMON CAUSES
1- Colicky (uterine)	Menstrual molimina, dysmenorrhea, expulsion of endometrial casts, abortion, ectopic, displaced IUCD, during HSG injection.
2- Dull aching (lower abd/back)	RVF uterus, pelvic tumors, PID, p. varicosities (it is due to pelvic congestion)
3- Throbbing pain	Pelvic abscess, acute disturbed tubal preg.
4- Referred back pain	Chronic cervicitis, uterine displacement (descent, inversion), pelvic ligament relax.
5- Itching (pruritus vulvae)	monilial vaginitis, trichomonal vaginitis, vulvar dystrophies, vulvar intraepithelial neoplasia, chronic irritation of the vulvar skin by abnormal discharges
6- Dyspareunia	a) superficial: vulvar & vaginal inflam. b) deep: endometriosis, PID, tumors

GYNECOLOGICAL PAIN/ ACUTE

A- Genital causes:

1-Pregnancy complications:

Ruptured ectopic pregnancy, abortion, degenerated leiomyoma.

2-Acute infections :

Endometritis, pelvic inflammatory disease (acute PID), tuboovarian abscess.

3-Adnexal disorders ;

Hemorrhagic functional ovarian cyst, torsion of adnexa, twisted para-ovarian cyst, ruptured ovarian cyst.

4-Recurrent pelvic pain ;

Midcycle pain (Mittelschmerz pain), dysmenorrhea (1ry or 2ry)

GYNECOLOGICAL PAIN/ ACUTE

B- Extra-genital Causes:

1-Urinary : Cystitis, urethritis, ureteral stones.

2-Gastrointestinal: Gastroenteritis, appendicitis, diverticulitis, intestinal obstruction, inflammatory bowel syndrome.

3-Musculo-skeletal : Abdominal wall hematoma, strangulated hernia.

4-Others : Acute porphyria, pelvic thrombo-phlebitis, aneurysm

GYNECOLOGICAL PAIN/ CHRONIC

A. GENITAL CAUSES

1. **Endometriosis.**
2. **Pelvic adhesions.**
3. **Pelvic support disorder; pelvic relaxation, intended tensing the levator plate, excess mobility of pelvic organs (universal joint or Allen-Masters syndrome).**
4. **Pelvic vascular congestion.**
5. **Residual ovary: following hysterectomy with or without removal of one ovary.**
6. **Ovarian remnant syndrome**
7. **Cervical stenosis.**

GYNECOLOGICAL PAIN/ CHRONIC

B- Extragenital

1-Gastro-intestinal ; Constipation, irritable bowel syndrome, inflammatory bowel syndrome, diverticulitis.

2- Urinary ; Urethral syndrome, interstitial cystitis.

3-Musculo-facial or neurologic ; Pelvic floor tension myalgia, piriformis syndrome, nerve entrapment, ventral hernia, rectus tension strain, myofascial pain, back or postural changes.

MENSTRUAL BLEEDING ABNORMALITIES

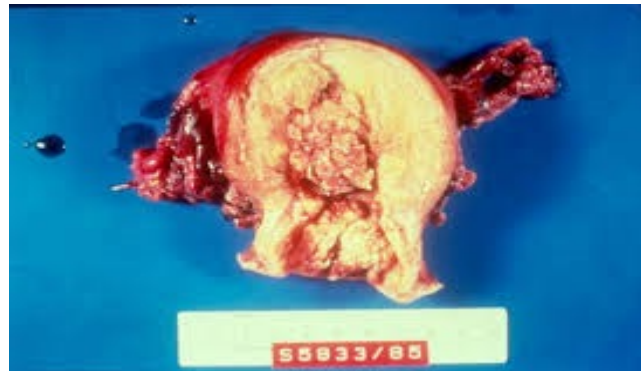
[A]. HEAVY MENSTRUAL FLOW (MENORRHAGIA)

- Excessive and /or prolonged **cyclic** uterine bleeding.
 1. Almost always dysfunctional bleeding (endocrinal) in peri-menarchal and perimenopausal periods .
 2. Gross pelvic pathology fibroids, polyps, endometrial carcinoma, uterine sarcoma.
 3. Bleeding disorders may be a cause ; e.g. Hemophilia, Von Willebrand disease,

MENSTRUAL BLEEDING ABNORMALITIES

[B]. METRRORRHAGIA

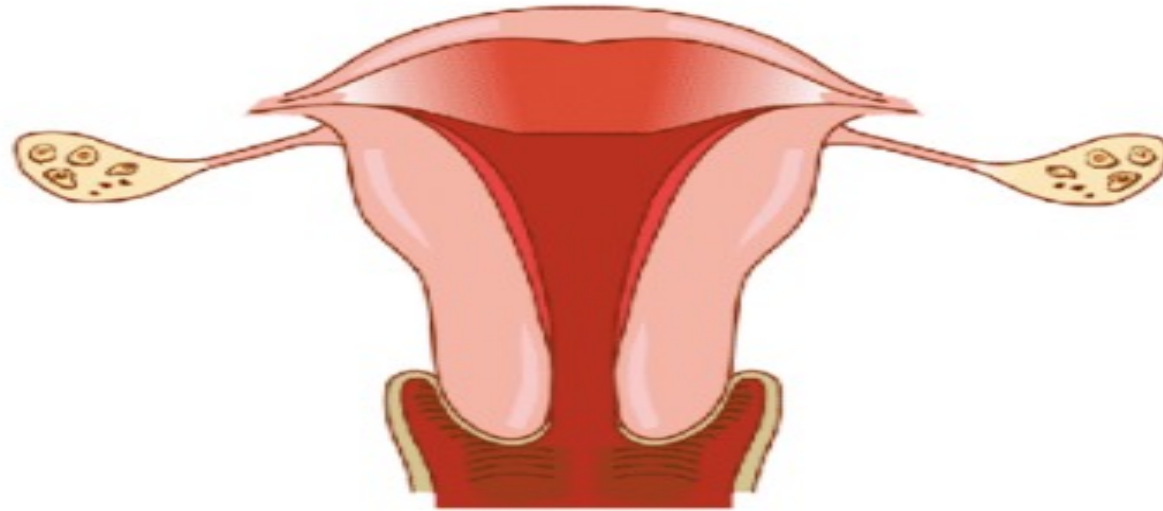
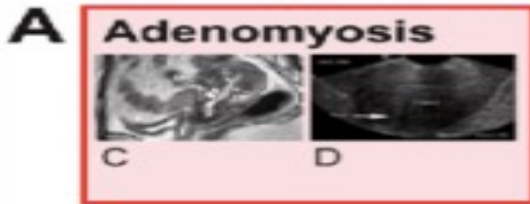
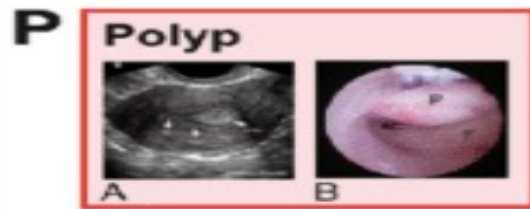
- It is abnormal **acyclic** genital bleeding . In cases of metrorrhagia a pelvic pathology should be searched for especially malignancy.
- Causes may be genital traumas, inflammations, neoplasms, or associated systemic cause.



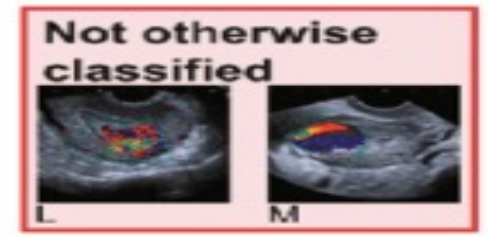
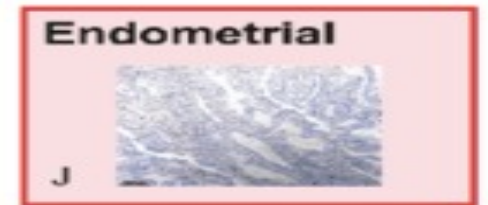
Endometrial cancer



polyp



- A: USS view of polyp
- B: Hysteroscopic view of polyp
- C: MRI of adenomyosis
- D: USS of adenomyosis
- E: Hysterectomy specimen containing fibroids
- F: Hysterectomy specimen containing endometrial cancer
- G: Histology of endometrioid carcinoma
- H: Excessive bruising
- I: USS of polycystic ovary
- J: Progesterone receptor localisation in secretory phase
- K: levonorgestrel-releasing intrauterine system (LNG-IUS)
- L: Doppler USS of AV malformation
- M: Doppler USS of endometrial pseudo-aneurysm



FIGO CLASSIFICATION

MENSTRUAL BLEEDING ABNORMALITIES

[C]. CONTACT BLEEDING

- It occurs only following coitus or vaginal manipulations.
- The cause may be cervical erosion (ectopy), or cervical cancer, or other ulcerative cervical / vaginal/vulvar lesions.



Cervical ectopy



Cervical cancer

MENSTRUAL BLEEDING ABNORMALITIES

[D]. POSTMENOPAUSAL BLEEDING

- (1) **Senile atrophic endometritis**; the most common cause.
- (2) **Endometrial hyperplasia**, extra-ovarian estrone [E1]
- (3) **Endometrial carcinoma**; the most serious condition.
- (4) **Post-menopausal hormone replacement therapy**; breakthrough bleeding.
- (5) **Other causes**; such as general causes of bleeding [as coagulation defects], local vaginal or vulval conditions (e.g. infection, trauma, or neoplasm).

MENSTRUAL BLEEDING ABNORMALITIES

[E]. AMENORRHEA

Primary amenorrhea is diagnosed if;

- (1) the absence of menstruation by the age of 14 years in the absence of growth or development of secondary sex characters, or
- (2) no menstruation by the age of 16 with or without growth or development of secondary sex characters.

MENSTRUAL BLEEDING ABNORMALITIES

[E]. AMENORRHEA

Secondary amenorrhea: is the absence of menstruation for 6 months or more or for a period of time equivalent to that of previous 3 consecutive cycles in a woman who was previously menstruating.

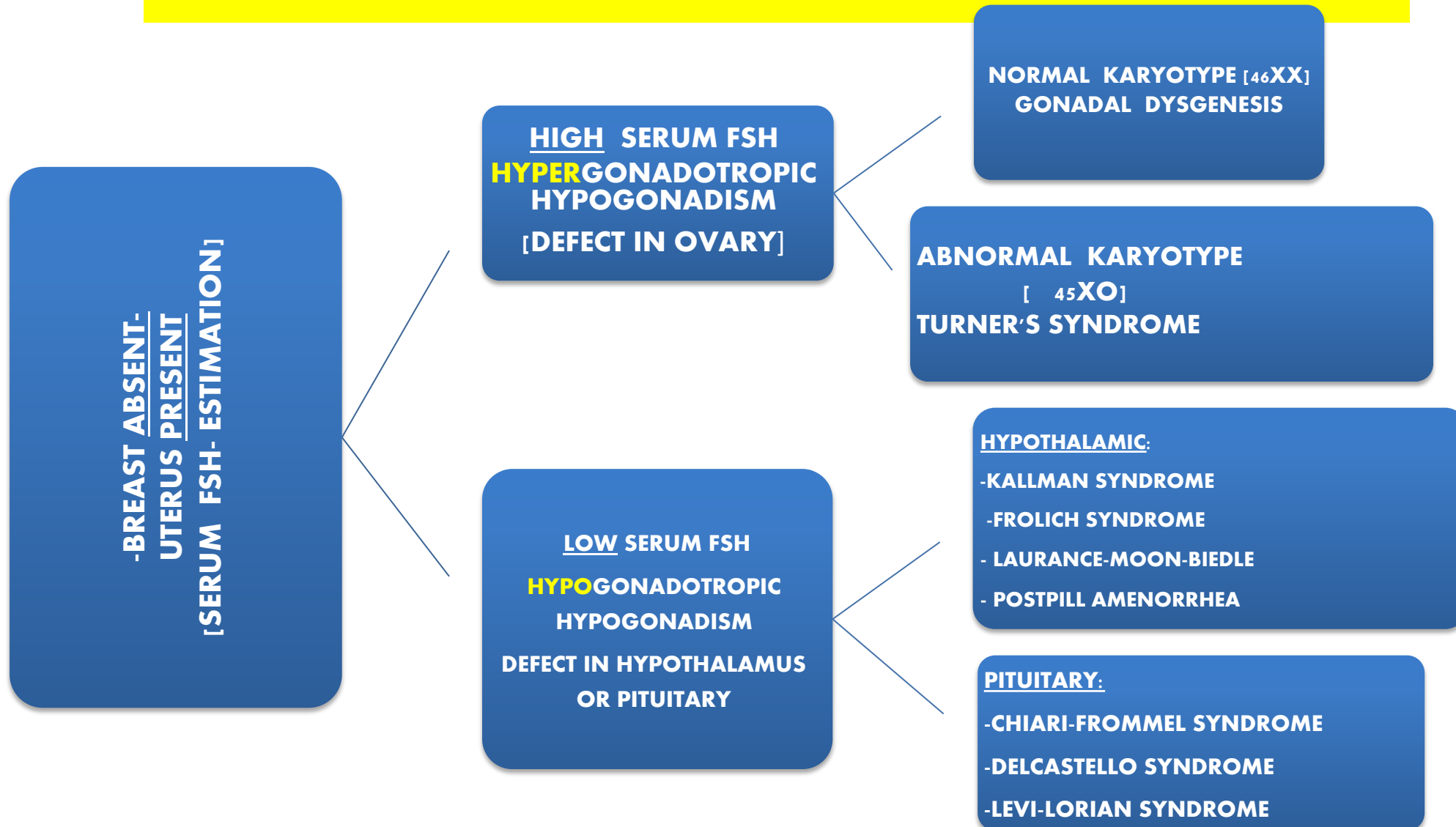
CLINICAL APPROACH TO A CASE OF PRIMARY AMENORRHEA

The patient is one of four:

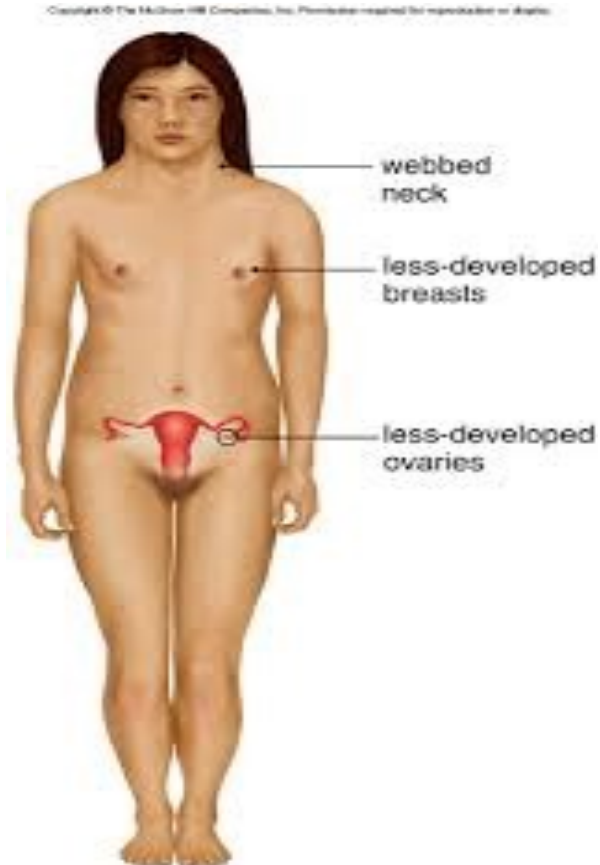
1. Breast absent- uterus present group. [B -/U+]
2. Breast developed- uterus absent group. [B+/U-]
3. Breast absent- uterus absent group. [B-/U-]
4. Breast developed- uterus present group. [B+/U+]

BREAST = ESTROGEN
WHILE
UTERUS = MULLERIAN
DEVELOPMENT

1- BREAST **ABSENT**- UTERUS **PRESENT**



PRIMARY AMENORRHEA



TURNER'S SYNDROME (45XO)



WOMEN WITH AIS (WIKIPEDIA)



L-M-B- syndrome

2- BREAST DEVELOPED- UTERUS ABSENT

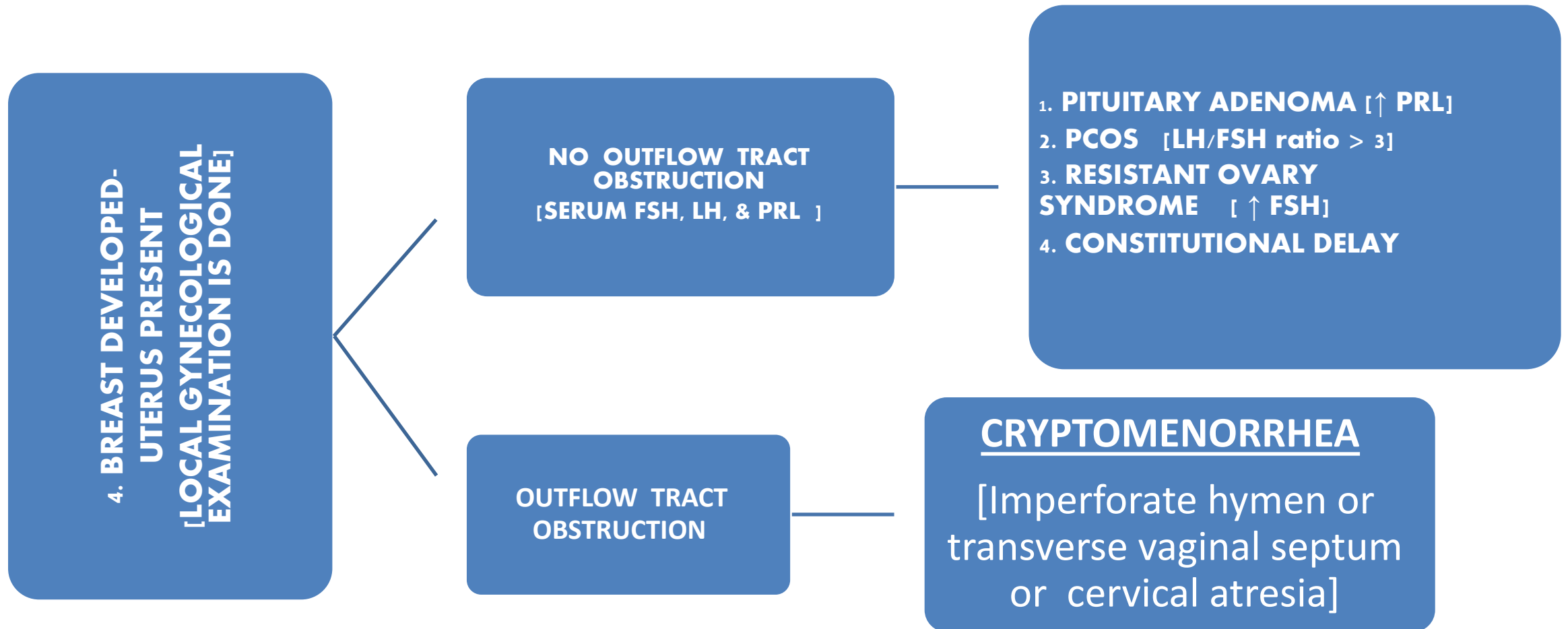
Only in 2 cases; androgen insensitivity syndrome (testicular feminization), and Müllerian agenesis:

Item	Androgen insensitivity	Mullerian agenesis
1- Axillary & pubic hair	Absent	Present
2- Serum testosterone	Male level	Female level
3- Karyotyping *	46XY (most important)	46XX
4- Gonads	Testes (mostly inguinal)	Normal ovaries
5- Fertility	Impossible	Possible via surrogate uterus (she will be the genetic mother)
6- Gonadectomy	Indicated before 25 years age (protect against malignancy)	Contraindicated
7- Inheritance	X-linked	Not hereditary

3-BREAST ABSENT- UTERUS ABSENT

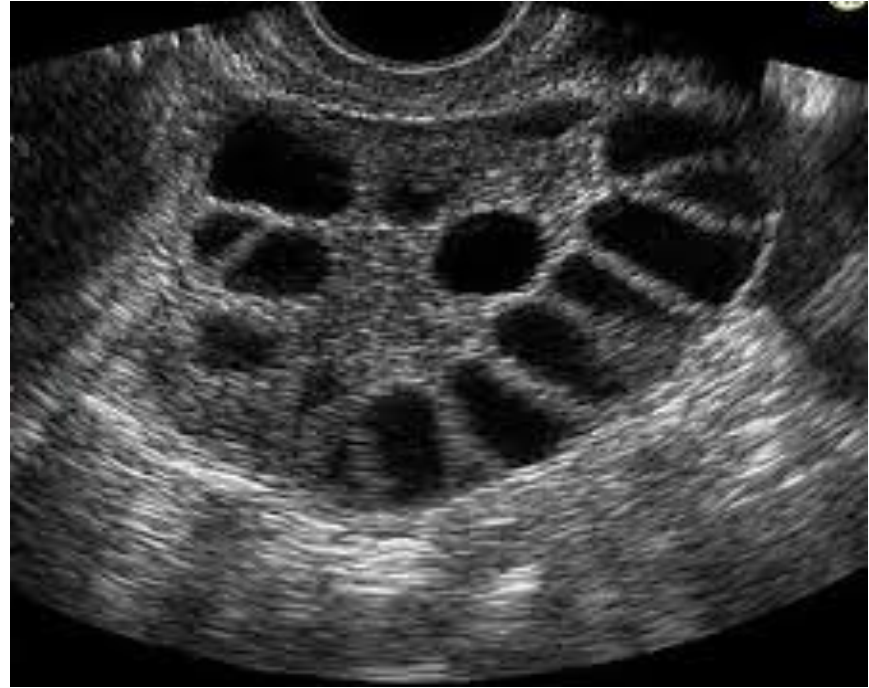
- This is a very rare condition.
- Karyotype is 46XY (i.e. genitically males)in all.
- It is due to enzymatic deficiency such as:
 - [a]. 17, 20 desmolase deficiency,
 - [b]. 17 alpha- hydroxylase deficiency in 46XY individuals, and
 - [c]. Agonadism.
- Those patients **do not respond** to exogenous estrogen replacement to help development of secondary sex characters such as breast development, hence the feminine constitution.

4- BREAST DEVELOPED- UTERUS DEVELOPED





Imprforate hymen



PCOS

**SECONDARY
AMENORRHEA**

**HCG testing negative
(no pregnancy)**

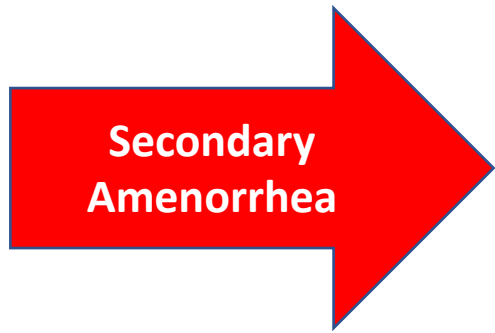
**Request for serum
PRL and TSH**

High PRL :
- Prolactinoma
- Drug induced
- Thyroid disease

**High TSH
hypothyroidism**

**Normal TSH & PRL:
Proceed to progestin
challenge test**

NEXT SLIDE



Progestin challenge test

Negative withdrawal bleeding
Request FSH

Low FSH:
Give cyclic E&P

High FSH=
Ovarian failure

- +VE BLEEDING=
HYPOGONADOTROPIC
- -VE BLEED= ASHERMAN

Positive withdrawal bleeding

- PCOS
- Idiopathic anovulation
- If virilization (request testosterone, DHEA-S, 17OHP)

VAGINAL DISCHARGE

I- Leucorrhoea:

increased normal discharge:

1. Chronic constipation.
2. Incomplete sexual act (i. e. sexual excitement without satisfaction-
orgasm)
3. Genital descent
4. Retro-verted flexed uterus [RVF].
5. Pelvic floor relaxation in multipara.
6. Pregnancy.
7. Benign pelvic masses e. g. fibroid.
8. Idiopathic with no definite cause.

VAGINAL DISCHARGE

II. Abnormal discharge:

- 1- **Monilial discharge:** white, scanty, thick, curd, itchy.
- 2- **Trichomonas discharge:** yellow, copious, thin frothy, fishy odor, associated with flea-beaten or strawberry vagina.
- 3- **Purulent:** pus; in postmenopausal pyometria, neglected pessary, infected polyp.
- 4- **Bacterial vaginosis:** whitish to yellowish, profuse.
- 5- **Urine:** characteristic odor, in urinary fistulas
- 6- **Amniotic fluid:** characteristic odor, alkaline PH, ferning +ve

PELVIC SWELLING; MASS

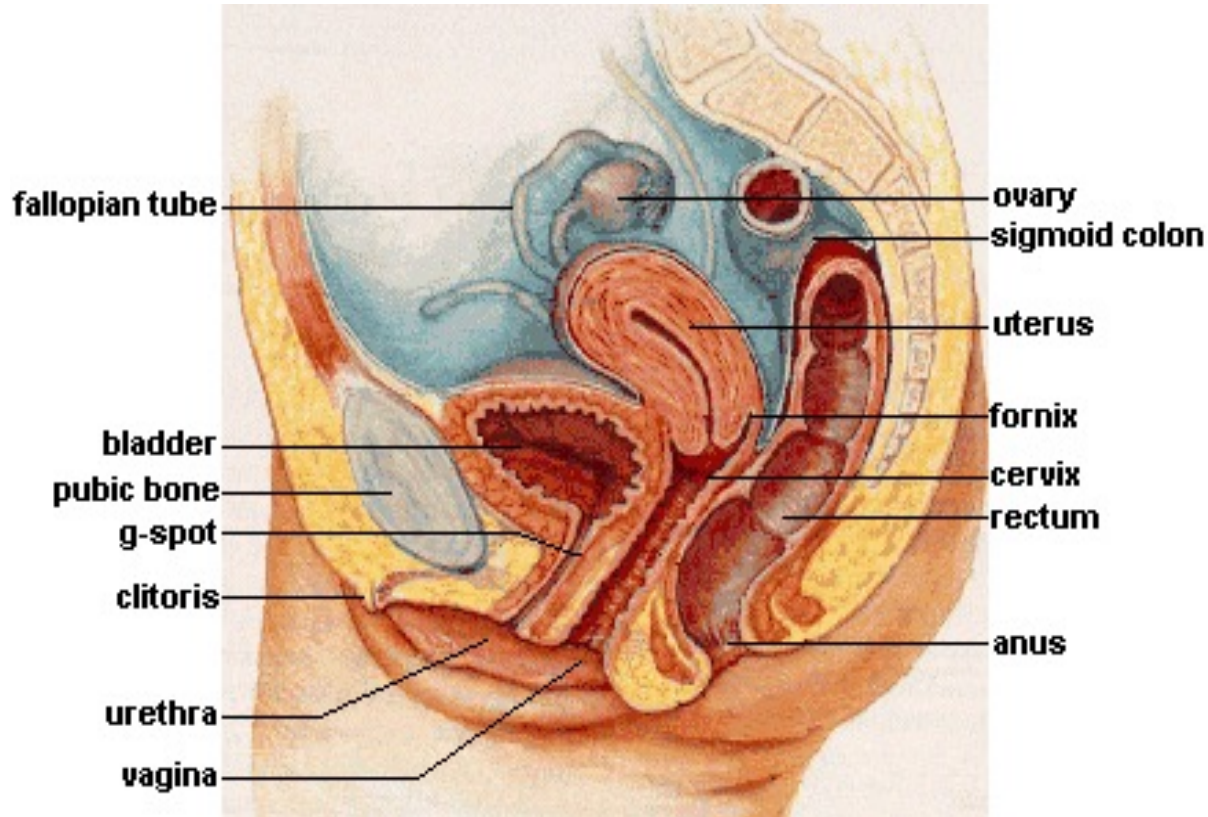
Diffuse abdominal swelling: 6F

1. **Fetus:** i. e. pregnancy (normal or abnormal).
2. **Fluid:** e. g. ascites or cyst (ovarian or peritoneal pseudo-cyst, or pseudo-pancreatic cyst)
3. **Flatus:** i. e. abdominal distension.
4. **Fat:** i. e. obesity.
5. **Feces:** i. e. intestinal obstruction.
6. **Fibroid** or other tumor.

PELVIC SWELLING; MASS

PELVIABDOMINAL SWELLING

May be *genital* and *extra-genital* causes



Genital : uterine pregnancy, tumors, distention
Cervical tumor, vaginal distention (hematocolpos), tubal distention or tumor , ovarian cysts or tumor, broad ligament cysts or fibroid

Extragenital: bladder fullness or tumor, rectal fullness or tumor, sigmoid colon fullness or tumor (megacolon), pelvic hematocele, pelvic abscess, retroperitoneal tumors (lymphoma, sarcoma, pelvic muscle tumors or hematomas.

PELVIC SWELLING; MASS

A]. GENITAL causes:

1. Uterine: pregnancy (the commonest), fibroid, adenomyosis, malignancy, pyometra, hematometra, pheseometra (distension by gas), subinvolution.
2. Cervix: fibroid, malignancy.
3. Broad ligament: paraovarian cyst, fibroid, hematoma, parametric abscess.
4. Vagina: hematocolpos, tumors.
5. Ovary & tube: ovarian tumors impacted in cul-de-sac, tubo-ovarian abscess, large hematosalpinx, hydrosalpinx, pyosalpinx, and tubal malignancy.

B]. EXTRA-GENITAL causes:

1. Urinary bladder: full bladder, bladder tumors.
2. Recto-sigmoid: fullness due to fecal impaction or tumors, mesenteric cyst.
3. Douglas' pouch: pelvic hemocele, pelvic abscess, large tumor implants, tuberculous peritonitis.
4. Retro-peritoneal: sarcoma, lymphoma, pelvic hydronephrotic kidney.

PELVIC SWELLING; MASS

SYMMETRICALLY ENLARGED UTERUS

1. **Pregnancy**: whether normal or abnormal (vesicular mole, ectopic pregnancy)
2. **Fibroid** (intramural or submucous).
3. **Adenomyosis** (the diffuse type).
4. **Subinvolution**.
5. **Myometrial hyperplasia** (as in metropathia hemorrhagica).
6. **Hematometra**, pyometra, pheseometra.
7. **Uterine malignancy**: as endometrial carcinoma, uterine sarcoma, choriocarcinoma.

PELVIC SWELLING; MASS

ASYMMETRICALLY ENLARGED UTERUS

- 1- Pregnancy:** cornual pregnancy or pregnancy in a uterine horn.
- 2- Fibroid :** multiple uterine fibroids, sub-serous fibroids
- 3- Adenomyosis:** the localized type
- 4- Hematometria:** in a non-communicating uterine horn.
- 5- Others:** conditions that cause dense pelvic adhesions including the uterus within it e.g. pelvic T.B., endometriosis, tubo-ovarian abscess, malignancy, prior surgeries

PELVIC SWELLING; MASS

CERVICAL ENLARGEMENT

1. **Congenital hypertrophy**, or elongation of the portio vaginalis (false prolapse).
2. **Granulomatous lesions**: as syphilis (gumma), T. B. , bilharziasis, amebiasis, or actinomycosis.
3. **Chronic cervicitis**: including endocervicitis, interstitial cervicitis, cervical erosion, Nabothian follicles, mucous polyp, and cervical ectropion.
4. Cervical **ectopic pregnancy** & cervical abortion [how to differentiate?].
5. **Cervical polypi** : whether true or false (corporeal polyp passing via the cervix).
How to differentiate?
6. **Cervical endometriosis**.
7. Cervical **neoplasms**: benign as fibroid or malignant as carcinoma.

PELVIC SWELLING; MASS

VAGINAL SWELLINGS

Cystic swellings:

1. Gartner's cyst.
2. Hymenal cyst.
3. Endometriotic cyst.
4. Implantation cyst, dermoid cyst.
5. Vaginitis emphysematosa.
6. Pseudocysts: cystocele, rectocele, enterocele, urethrocele, hemangioma, lymphangioma, hematoma.

Solid swellings:

1. Fibroma & neurofibroma.
2. Organized hematoma, may be infra-levator or supra-levator.
3. Vaginal cancer.
4. Foreign body granuloma

PELVIC SWELLING; MASS

VULVAR SWELLINGS

A]. Swellings of NON-VULVAR ORIGIN appearing at the vulva:

1. Anterior vaginal wall: urethrocele, cystocele, Gartner's cyst, urethral diverticulum, urethral caruncle.
2. Posterior vaginal wall: rectocele, enterocele.
3. Vaginal vault: vault prolapse.
4. The cervix: congenital elongation of portio-vaginalis, 2nd degree uterine descent, cervical polyps.
5. The uterus: 3rd degree uterine descent, uterine inversion, pedunculated corporeal fibroid polyp.
6. The round ligament & inguinal canal: hydrocele of the canal of Nuck, inguinal hernia.

PELVIC SWELLING; MASS

VULVAR SWELLINGS

B]. Swellings of **VULVAR ORIGIN**:

1-Vulvar cysts:

- a). Bartholin cyst
- b). Sebaceous cyst
- c). Endometriotic cyst
- d). Implantation cyst
- e). Hymenal cyst
- f). Clitoral cyst

2- Traumatic : vulvar hematoma

3- Inflammatory: Bartholin, condyloma accuminata, condyloma lata, lymphogranuloma venerium, granuloma inguinale, vulvar granuloma (B,TB, Foreign body), allergic.

PELVIC SWELLING; MASS

VULVAR SWELLINGS

B]. Swellings of VULVAR ORIGIN: (cont.,)

4- Neoplastic swellings:

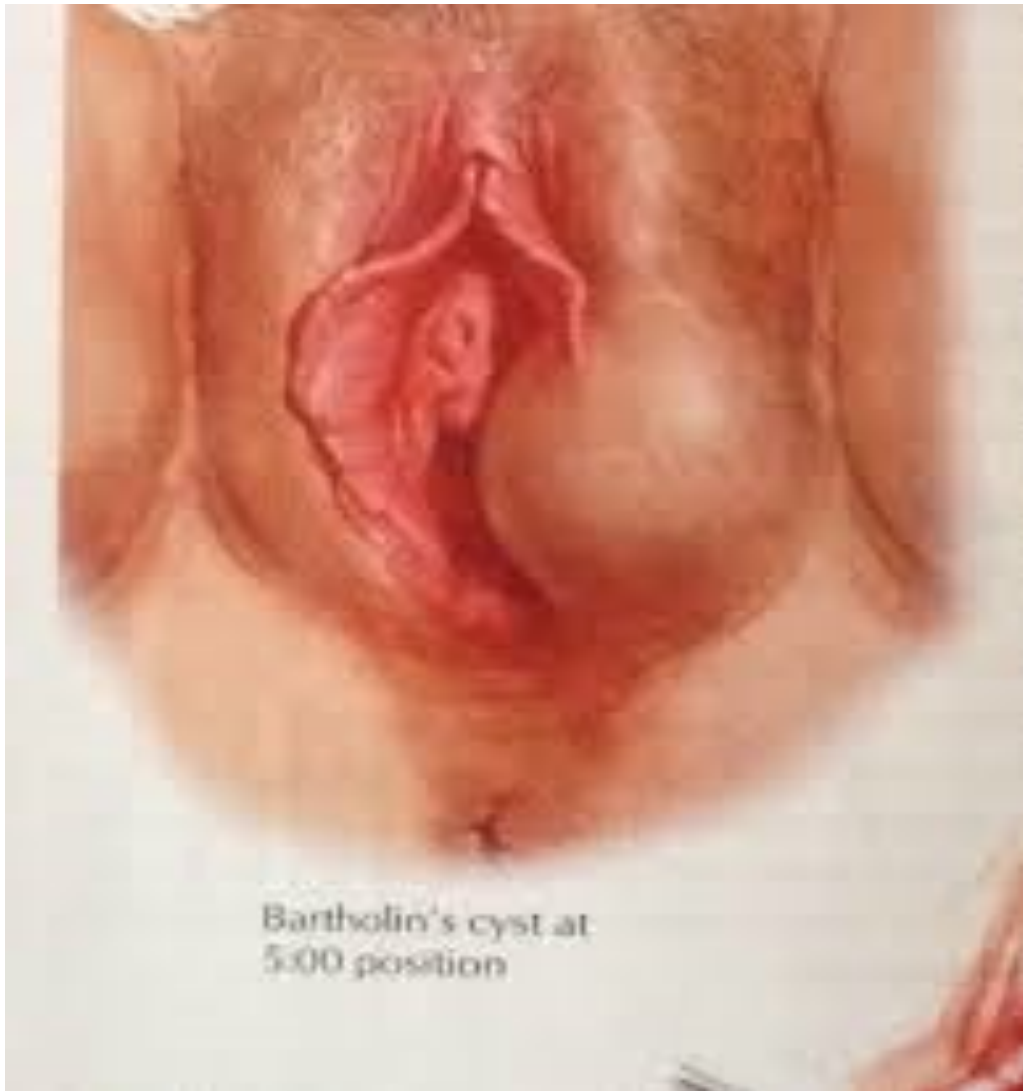
- a). Benign: as fibroma, lipoma, hidradenoma, papilloma.
- b). Malignant: as carcinomas, melanoma, sarcomas.

5- Vascular swelling:

- a). Vulvar edema
- b). Vulvar varicosities
- c). Vulvar elephantiasis

6- Congenital swellings:

- a). Congenital hypertrophy of clitoris
- b). Congenital hypertrophy of the labia







PELVIC SWELLING; MASS

(A). Genital causes:

(a) Uterine:

- 1- Retroverted uterus (RVF).
- 2- Posterior wall uterine fibroid.
3. Posterior cervical fibroid.

(b) Tubal:

- 1- Hematosalpinx (ectopic pregnancy).
- 2- Hydrosalpinx.
- 3- Pyosalpinx.

(C). Ovarian:

1. Prolapsed ovary (causes deep dyspareunia).
2. Non neoplastic ovarian swelling.
3. Small- sized ovarian neoplasm.

PELVIC SWELLING; MASS

B]. EXTRA-GENITAL causes:

i. Cul-de-sac:

- 1- Pelvic hematocele (mostly due to disturbed ectopic pregnancy)
- 2- Pelvic abscess (what are the sites of pointing)
- 3- pelvic tuberculous peritonitis
- 4- pelvic endometriosis.
- 5- metastatic implants e. g. from ovarian cancer.

[ii] Rectal causes:

- 1- Impacted fecal matter.
- 2- Cancer rectum

[iii] Retro-peritoneal causes:

- 1- Pelvic kidney.
- 2- Retro-peritoneal tumors e. g. sarcoma.
- 3- Tumors of the pelvic bones.

Thank you

