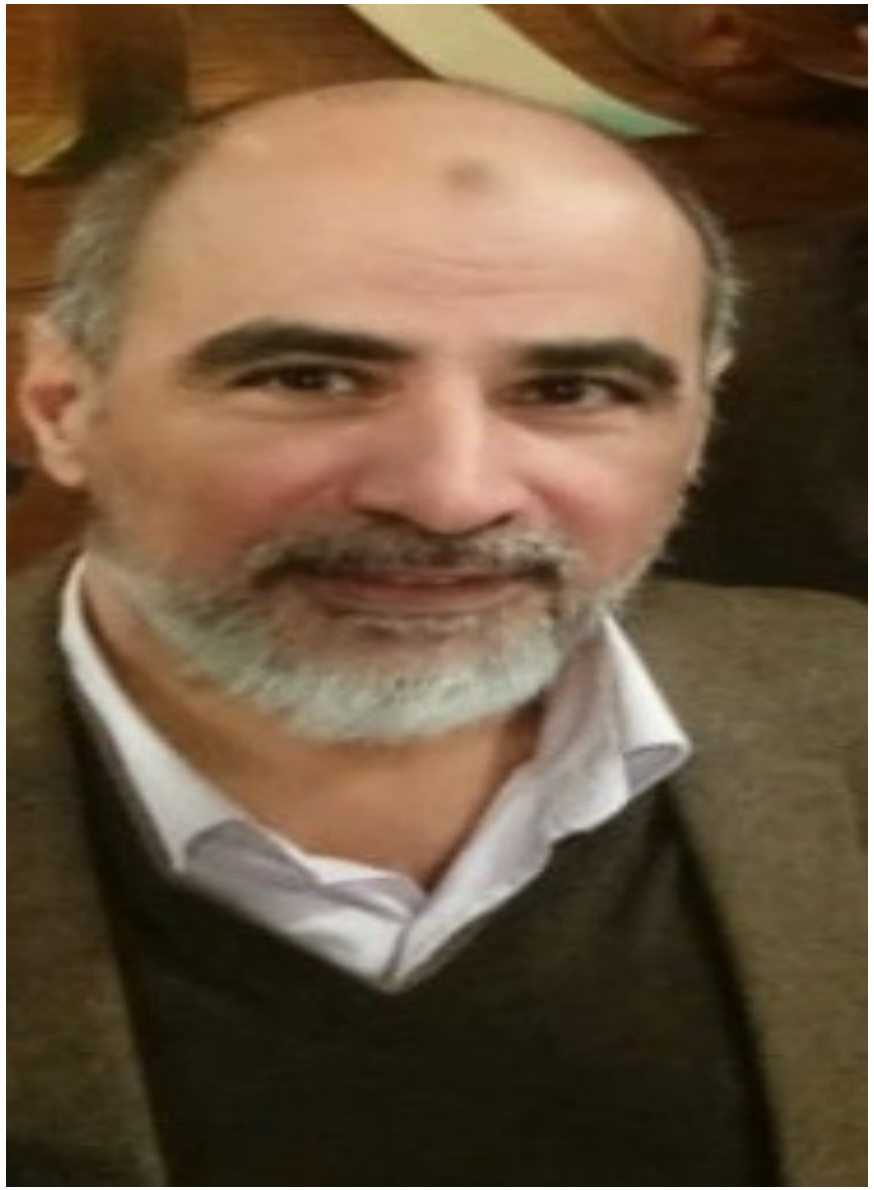

GYNECOLOGICAL CASE TAKING

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- Prof. of OB/GYN
- Faculty of Medicine
- Mansoura University- EGYPT

3

The Gynecological Diagnosis

- **The main objective of the gynecological case taking is to reach the ideal gynecological diagnosis.**
- **The ideal gynecological diagnosis includes the following:**

  1– Etiological diagnosis; including the offending cause.

  2–Anatomical diagnosis; including the anatomic alteration

  3–Functional diagnosis; including disordered function.

The Gynecological Diagnosis

These 3 items are most evident practically in the diagnosis of a case of genital prolapse. Example :

Postmenopausal [= etiological diagnosis] urethro–cystocele, rectocele, 2nd degree uterine descent [=anatomical diagnosis], supravaginal elongation of the cervix, cervical trophic ulcer, positive stress incontinence [=functional diagnosis].

HISTORY TAKING

Items of history taking include the following:

1–Personal history.

2–Complaint.

3–Menstrual history.

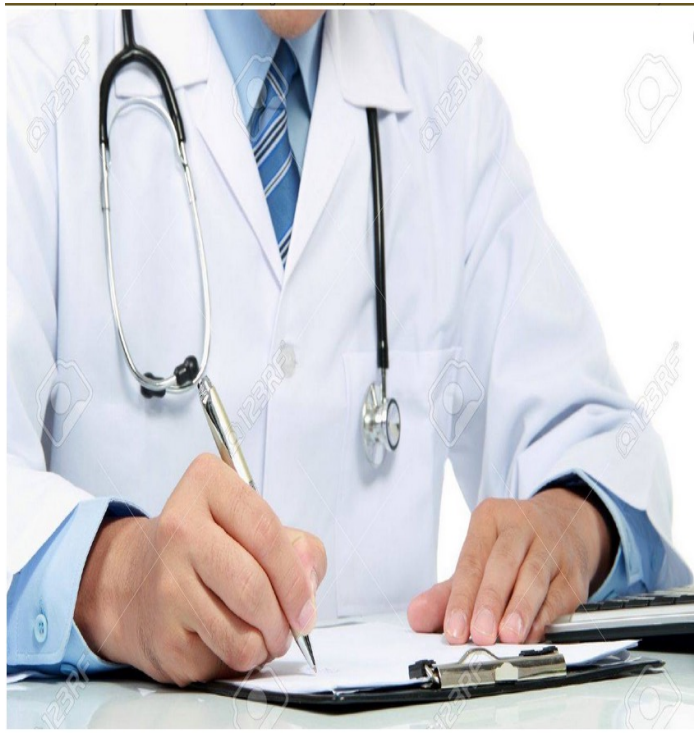
4–Obstetric history.

5–Past history.

6–Family history.

7– Sexual history; [only in cases of infertility].

8–Present history.



Personal History

AGE; Knowing the age of a gynecologic case is of great help in diagnosis because certain gynecological diseases are common in some age groups than others

Age period	Common gynecological disorder
Infancy & childhood [birth–to–9 years)	**Birth crisis, witch's milk, ambiguous genitalia, *sarcoma potyroides*, some malignant germ cell ovarian tumors, precocious puberty, vulvo–vaginitis of children, iatrogenic**
Adolescence &puberty [9y–16y]	**Dysfunctional uterine bleeding(DUB), primary amenorrhea**
Childbearing period [16y–40y]	**Pregnancy complications, infertility, genital infection, benign tumors (e. g. fibroid)**
Perimenopause [45–55y]	**DUB, tumors (benign &malignant)**
Post–menopause	**Malignancy, estrogen–deficiency sequelae**

Personal History

- **Occupation:** → **Cancer cervix – genital prolapse – endometriosis**
- **Marital status & number of living offsprings ;**
  - **Early age at the 1st coitus (<15 years)–→ Ca CX**
  - **The presence of sufficient number of children may be a determining factor in selection of the surgical procedure in certain diseases; (OV. CA), PROLAPSE OP**
- **Special habits: smoking may be a risk factor for cervical neoplasia, however it is said that it has protective effect against endometrial carcinoma.**
- **Personal history of the husband: work, smoking, other wife, socioeconomic status, related disease.**

COMPLAINT:

- The gynecologic case may complain of one or more of the following 5 complaints: ***pain***, ***bleeding***, ***discharge***, ***swelling***, ***or infertility***.
- Complaints should be in the patient's own words without using *scientific* terms.
- Complaints (if more than one) should be arranged *chronologically* (i. e. according to the onset of their occurrence). Or they may be arranged according their *importance* from the patient's point of view.

MENSTRUAL HISTORY:

The items of menstrual history include the following items in sequence:

1– **Menarche (onset)**: It is the 1st day of the 1st menses in the woman's life. Menarche is the climax of the pubertal events including breast development *(thelarche)*, axillary hair development *(adrenarche)*, pubic hair development *(pubarche)*, and growth spurt.

2– **Cycle rhythm**: whether regular or irregular.

3– **Cycle length**: It is the duration from the 1st day of the cycle to the 1st day of the next cycle. The normal cycle length simply ranges from 21 to 35 days.

4– **Duration of menstrual flow**: It is the period of time during which menstrual blood flows through the vagina. The normal duration is 2–8 days

MENSTRUAL HISTORY:

5-Character of flow; the characters of menstrual flow regarding **amount**, **color** & **odor** should be mentioned.

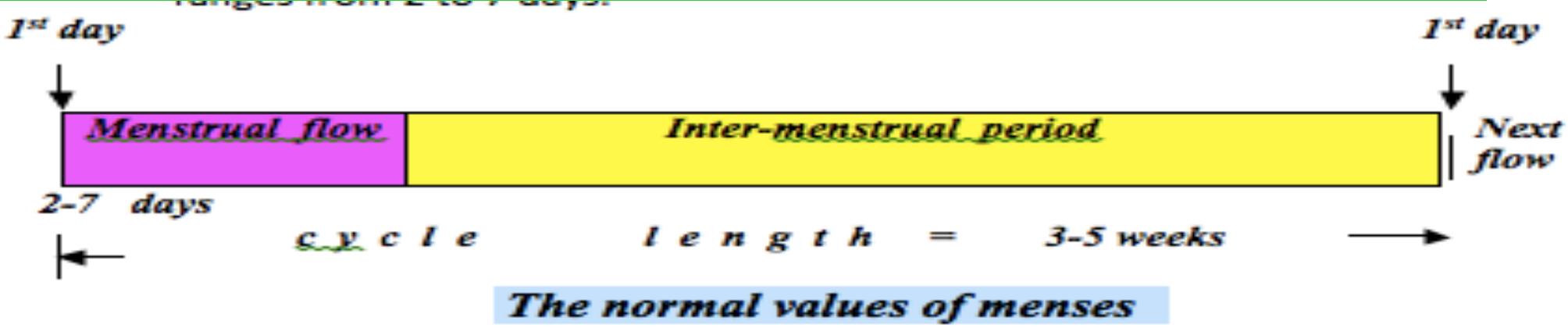
6-Dysmenorrhea: It is a pain related to menses severe enough to prevent the woman from doing her usual daily activities.

7-The intermensrual period (IMP): It is the period from the last day of flow to the 1st day of the next flow. The presence or absence of **pain**, **bleeding**, or **discharge** should be asked for.

8-The current use of contraception*:* The type of the contraceptive method as well as the duration of its use should be asked for.

9-The 1st day of the last normal menstrual period: PRE-MID, OR POST MENSTRUAL?

MENSTRUAL HISTORY:



The normal values of menses

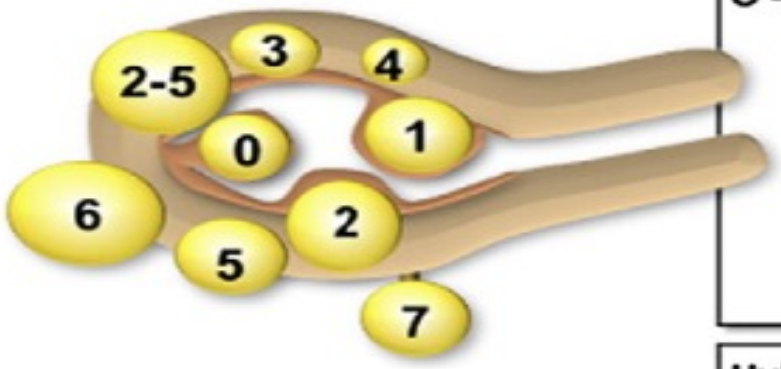
Term	Definition
Menorrhagia	Excessive and/or prolonged cyclic bleeding
Metrorrhagia	Irregular (acyclic) uterine bleeding not related to menses
Oligomenorrhea	The cycle length is more than 35 days (i.e. infrequent menses)
Polymenorrhea	The frequent menstruation i.e. the cycle length is less than 21 days.
Hypomenorrhea	Is the scanty menstrual flow.
Hypermenorrhea	Is a cycle with excessive menstrual flow with normal duration.

Polyp
Adenomyosis
Leiomyoma
Malignancy & hyperplasia

Submucosal
Other

Coagulopathy
Ovulatory dysfunction
Endometrial
Iatrogenic
Not yet classified

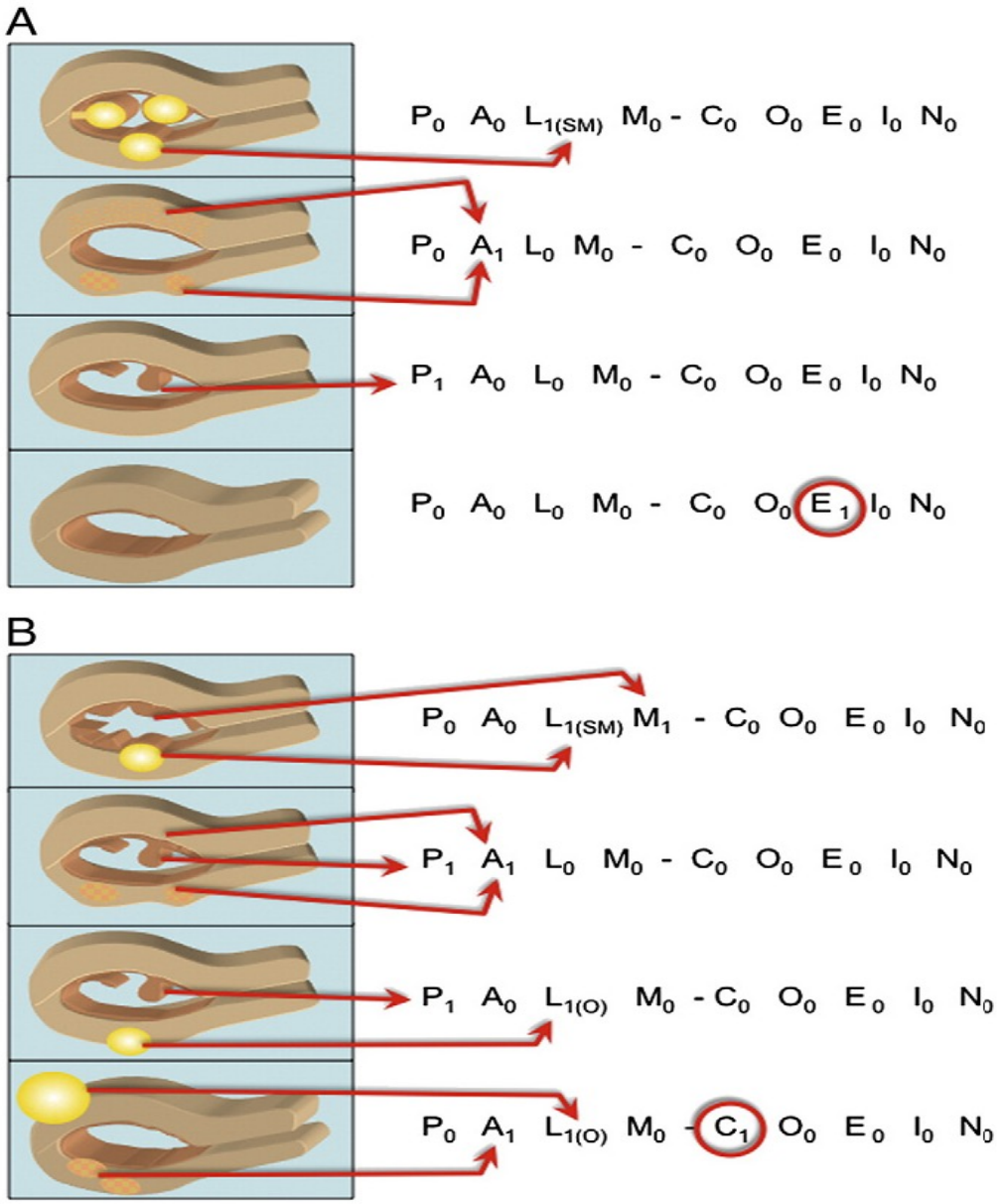
Leiomyoma subclassification system

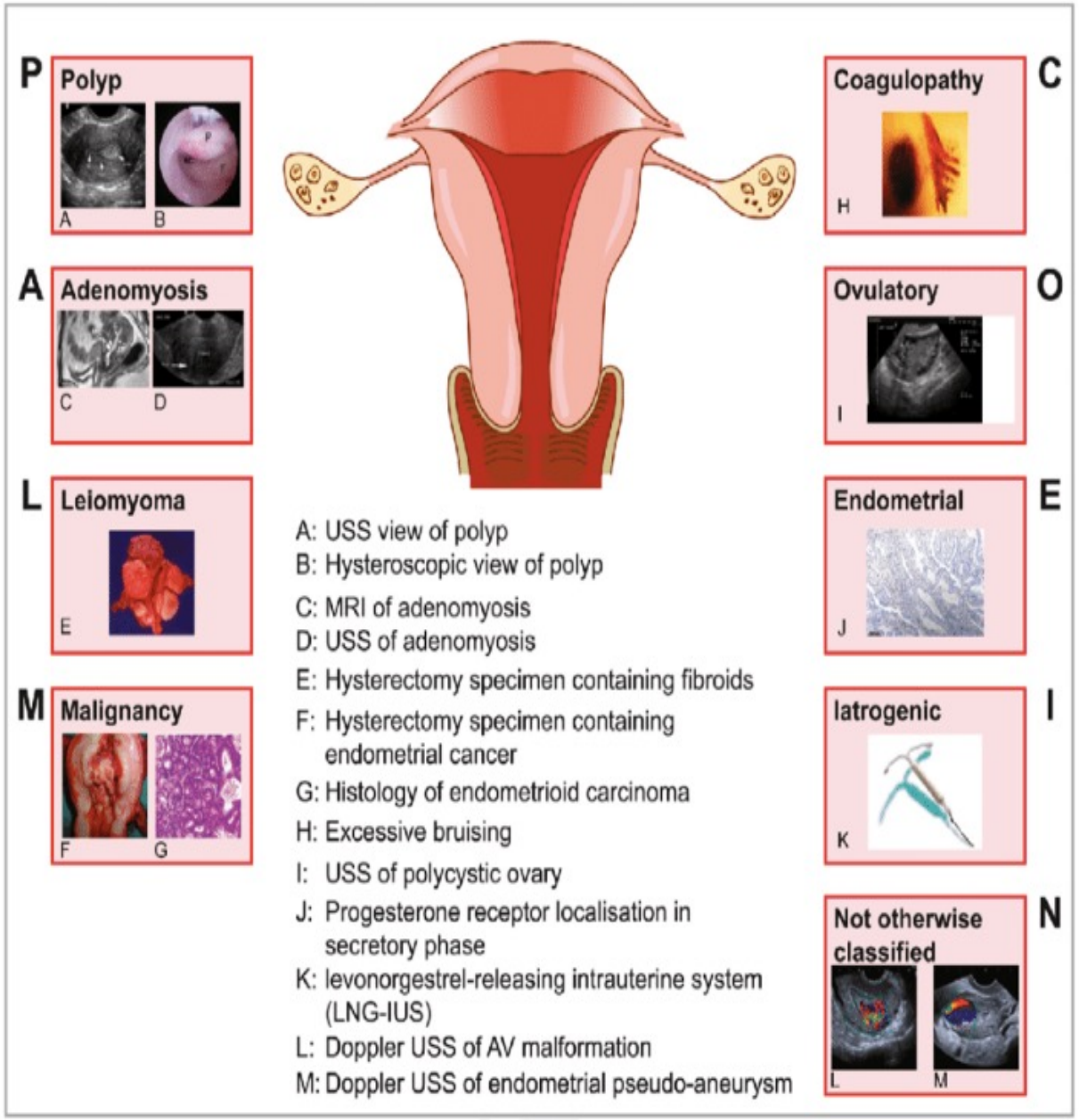


SM - Submucosal	0	Pedunculated intracavitary
	1	<50% intramural
	2	≥50% intramural
O - Other	3	Contacts endometrium; 100% intramural
	4	Intramural
	5	Subserosal ≥50% intramural
	6	Subserosal <50% intramural
	7	Subserosal pedunculated
	8	Other (specify e.g. cervical, parasitic)

Hybrid leiomyomas (impact both endometrium and serosa)	Two numbers are listed separated by a hyphen. By convention, the first refers to the relationship with the endometrium while the second refers to the relationship to the serosa. One example is below	
	2-5	Submucosal and subserosal, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.

FIGO CLASSIFICATION & TERMINOLOGY


A
P0 A0 L1(SM) M0 - C0 O0 E0 I0 N0
P0 A1 L0 M0 - C0 O0 E0 I0 N0
P1 A0 L0 M0 - C0 O0 E0 I0 N0
P0 A0 L0 M0 - C0 O0 E1 I0 N0
B
P0 A0 L1(SM) M1 - C0 O0 E0 I0 N0
P1 A1 L0 M0 - C0 O0 E0 I0 N0
P1 A0 L1(O) M0 - C0 O0 E0 I0 N0
P0 A1 L1(O) M0 - C1 O0 E0 I0 N0


P
Polyp
A
B
A
Adenomyosis
C
D
L
Leiomyoma
E
M
Malignancy
F
G
C
Coagulopathy
H
O
Ovulatory
I
E
Endometrial
J
I
Iatrogenic
K
N
Not otherwise classified
L
M
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

OBSTETRIC HISTORY:

1. ***Gravidity & parity.***
2. ***Full term normal pregnancies (FTNP).***
3. ***Full term normal deliveries (FTNDs).***
4. ***Preterm labors.***
5. ***Stillbirth (SB).***
6. ***Difficult labors.***
7. ***Cesarean sections (CS).***
8. ***Last delivery date.***
9. ***Abortions.***
10. ***Puerperia.***

PAST HISTORY

- ***Past history of similar condition.***
- ***Past history of medical disease:*** **such as diabetes mellitus, hypertension, bilharziasis, tuberculosis, irradiation, drug sensitivity.**
- ***Past history of surgical operations:*** **the nature& date of operation should be determined.**
- ***Past history of gynecologic operation:*** **the nature& date of operation should be determined.**
- ***Past history of gynecologic therapy:*** **as gestagen therapy in cases of abnormal uterine bleeding; the drugs, duration of therapy, and response to treatment should be all mentioned.**
- ***Past history of contraception:*** **if not currently used.**

FAMILY HISTORY:

- *Family history of heriditary disease* e. g. diabetes, hypertension, chromosomal anomalies,..... etc
- *Family history of familial non–heriditary diseases* e. g. rheumatic heart disease, tuberculosis (these diseases result in common bad socioeconomic conditions).
- *Family history of a similar condition in the family*: this is of special importance in certain diseases such as *'cancer family syndrome'* including ovarian, breast, endometrial cancers plus familial colonic polyposis. Other conditions requires asking for other affected members of the family such as '*androgen insensitivity syndromes*' which are inherited as x–linked from the mother resulting in what is called '*testicular feminization syndrome*'

SEXUAL HISTORY

It should be taken in cases of infertility. Its items include the following.

- ***Frequency of coitus:*** it is registered per week.
- ***Position during coitus:*** the commonest position is female dorsal position.
- ***Presence of libido:*** it is the female sexual desire. It is mentined as positive or negative. Lack of libido is called ' frigidity'.
- ***Presence of orgasm:*** it is the climax of sexual pleasure. It is mentioned as positive or negative.
- ***Dyspareunia:*** it is pain during intercourse- superficial or deep dyspareunia. Apareunia d.t. vaginismus (violent reflex spasm of the levator ani, perineal muscles, gluteal muscles, and adductors of the thigh on any attepmt at sexual intercourse making intromission impossible. It is usually of psychogenic origin).
- ***Use of lubricants:*** to facilitate intromission, should be mentioned.
- ***Flour semenis:*** it means escape of semen from the vagina immediately after ejaculation. In most fertile women some degree of flour semenis occurs.
- ***Postcoital vaginal douches:*** the female should be asked if she perform immediate postcoital vaginal douches or not. Water per se is considered as spermicidal.

PRESENT HISTORY

The present history of a gynecologic case consists of the following items:

- *Analysis of the complaint*: regarding its **character**, the **duration**, the **onset** (acute, gradual, insidious), the **course** (progressive, regressive, or stationary), **what increase**, **what decrease**, **association of other symptoms**, **previous treatments** (since what time, its duration, its types, results of treatments).
- *Related urinary & gastrointestinal symptoms*.

CLINICAL PHYSICAL EXAMINATION

Examination of a gynecologic case consists basically of the following items:

1- General examination.

2- Abdominal examination.

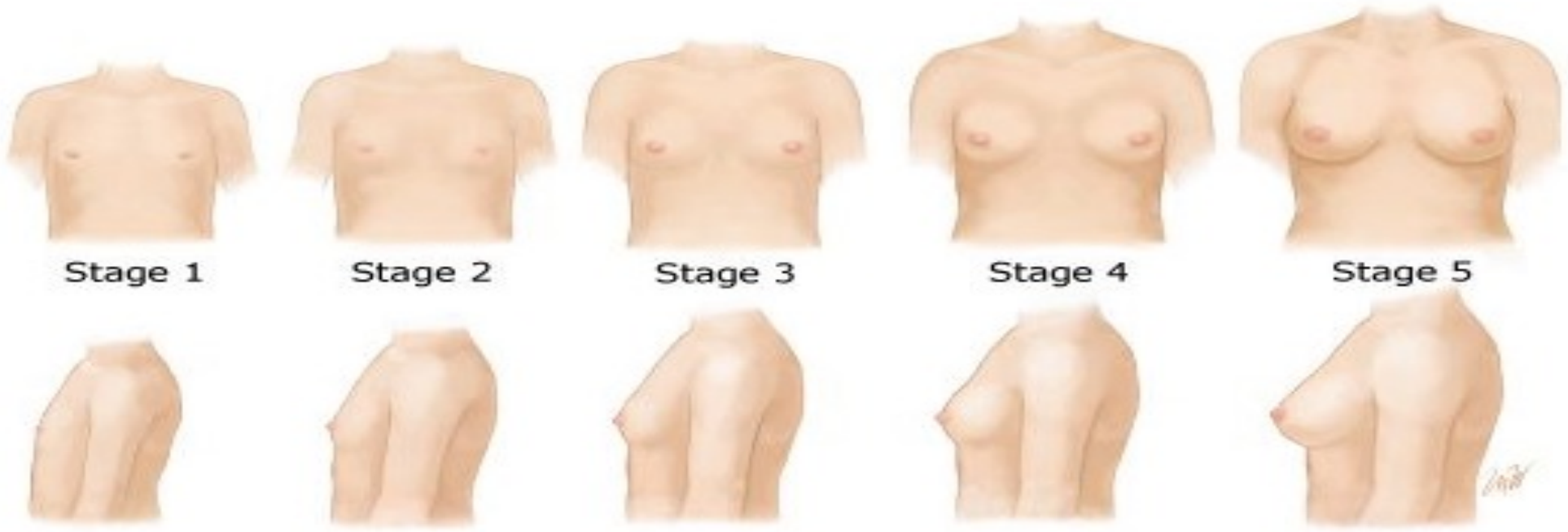
3- Local gynecologic examination:

- **Vulval inspection.**
- **Vaginal palpation.**
- **Bimanual examination**
- **Speculum examination**
- **Special clinical tests (in certain cases)**

General examination.

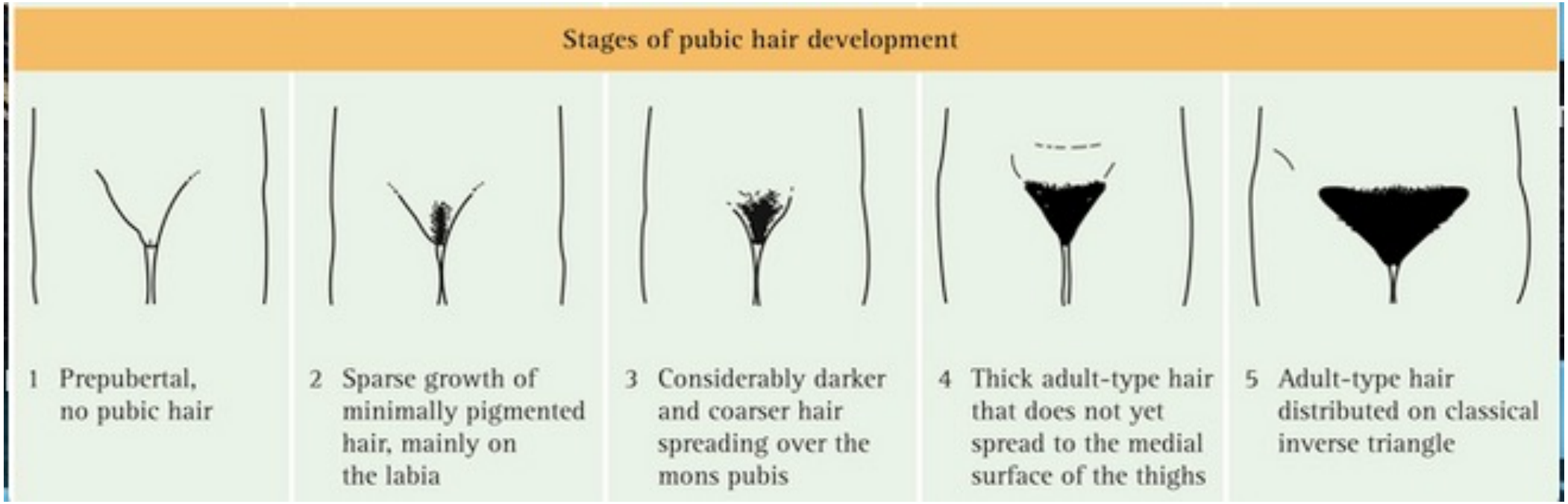
- Gait: what causes abnormal gait?
- Constitution; feminine, masculine
- Built ; BMI 19-24 kg/M^2 >
- Vital signs (BP-Pulse-temp-RR)
- *General examination of the patient from the head to the heel: head, neck, breasts, chest & heart, limbs & back*

Tanner staging of breast development in girls



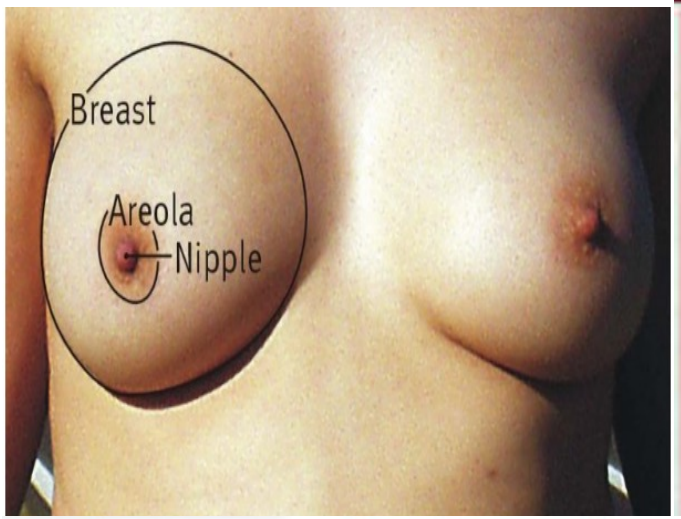
Stage 1: Prepubertal.
Stage 2: Breast bud stage with elevation of breast and papilla; enlargement of areola.
Stage 3: Further enlargement of breast and areola; no separation of their contour.
Stage 4: Areola and papilla form a secondary mound above level of breast.
Stage 5: Mature stage with projection of papilla only, related to recession of areola.

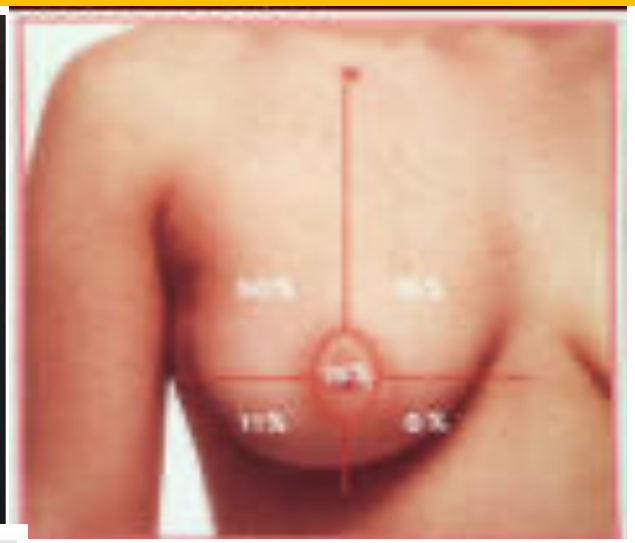
General examination.



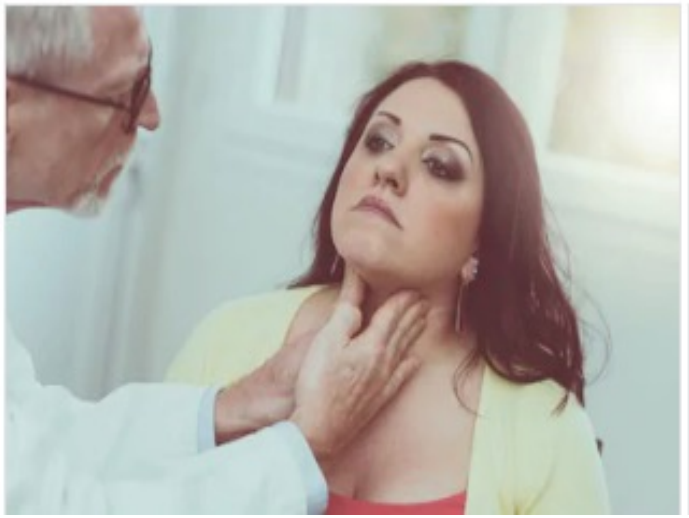
General examination.

BREAST EXAMINATION

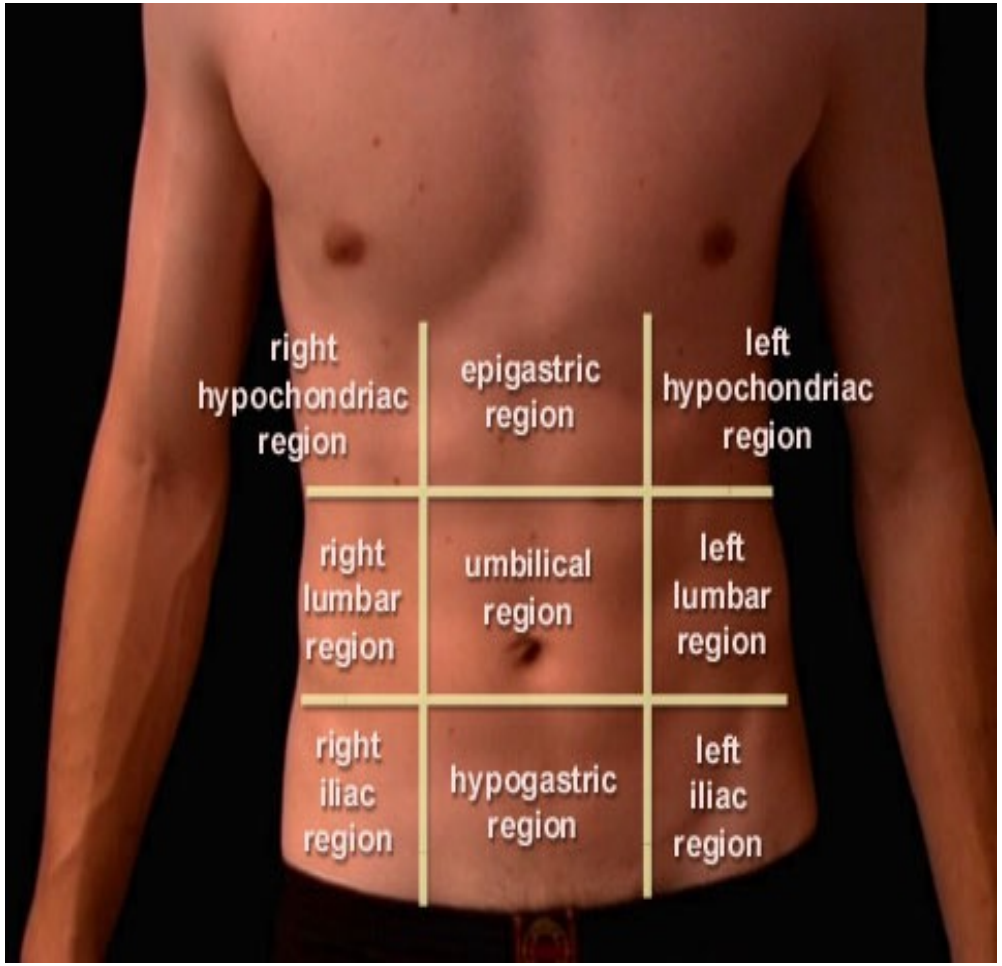


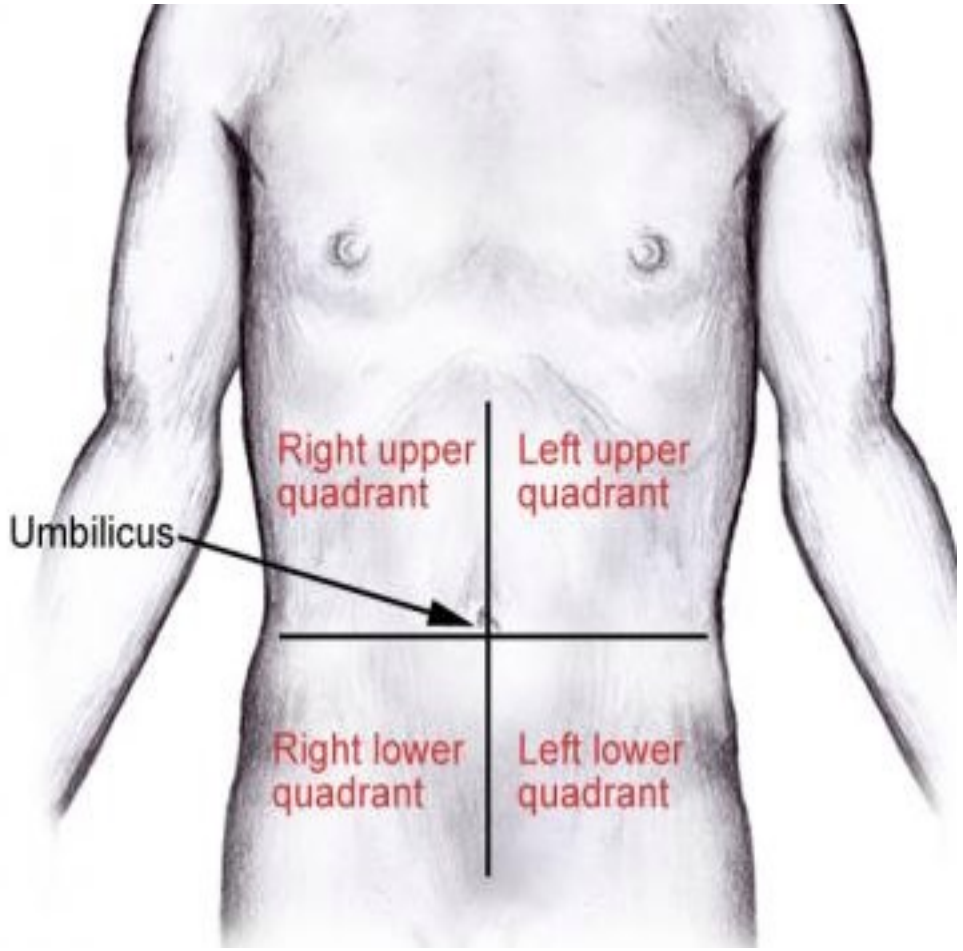


THYROID GLAND EXAM



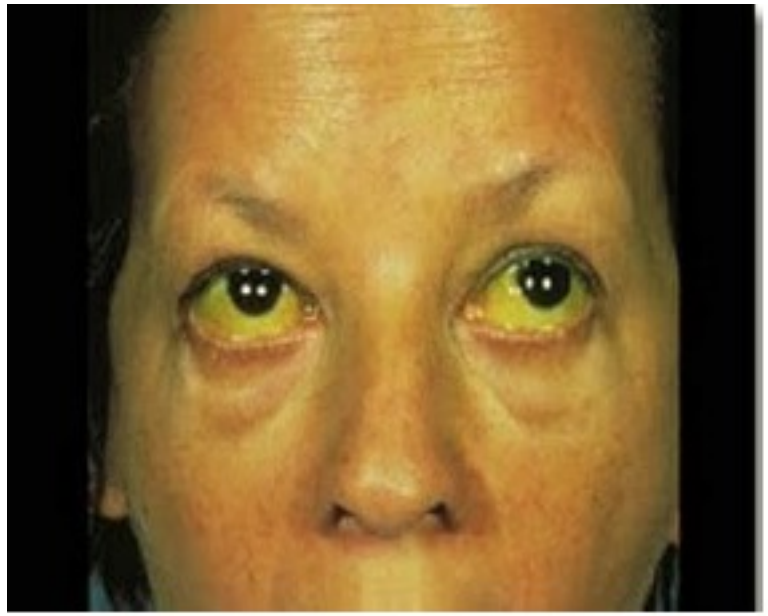
Abdominal Examination

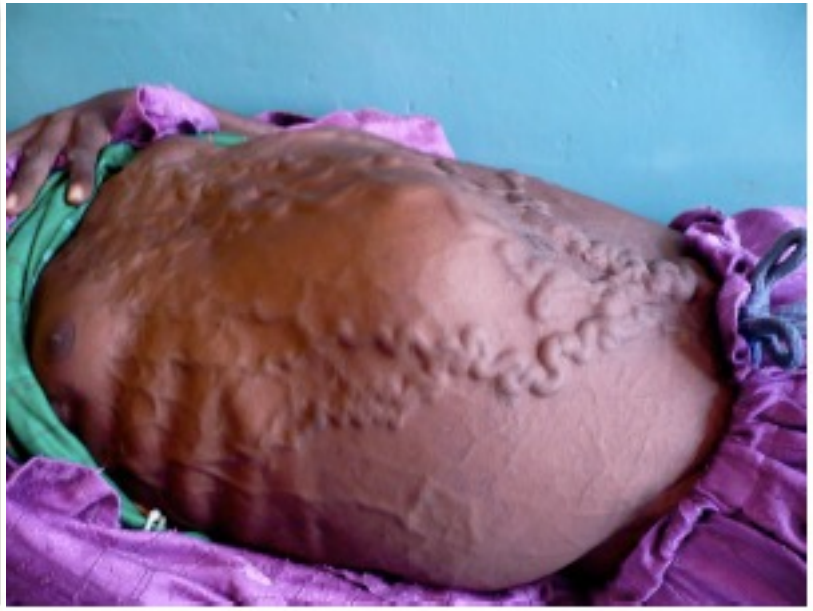




Abdominal Examination

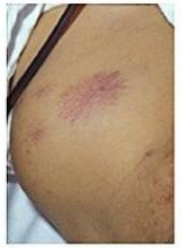
INSPECTION	• **Contour, movement with respiration, subcostal angle, umbilicus, skin.** • **Hernial orifices, divercation of rectus muscle, pubic hair**
PALPATION	• **Superficial palpation; tenderness, rigidity, superficial masses** • **Deep palpation; liver, spleen, renal angles, abdominal Mass, Parietal mass**
PERCUSSION	• **Dullness over a mass** • **Shifting dullness for ascites/ ovarian cyst**
AUSCULTATION	**Intestinal sounds, venous hum**

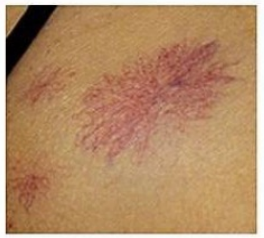


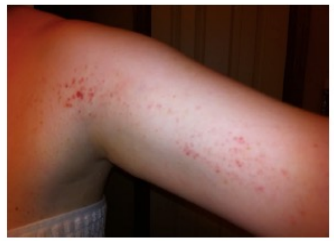


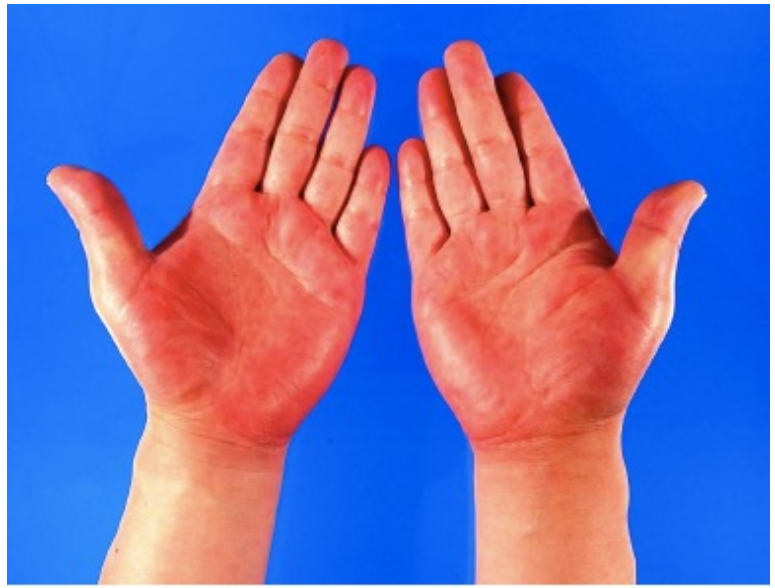
ARMS

- Spider naevi (telangiectatic lesions)
- Bruising
- Wasting
- Scratch marks (chronic cholestasis)





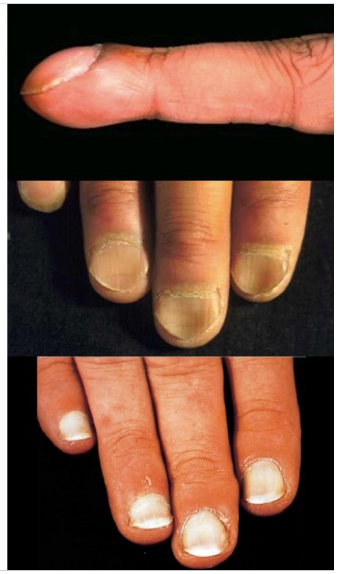




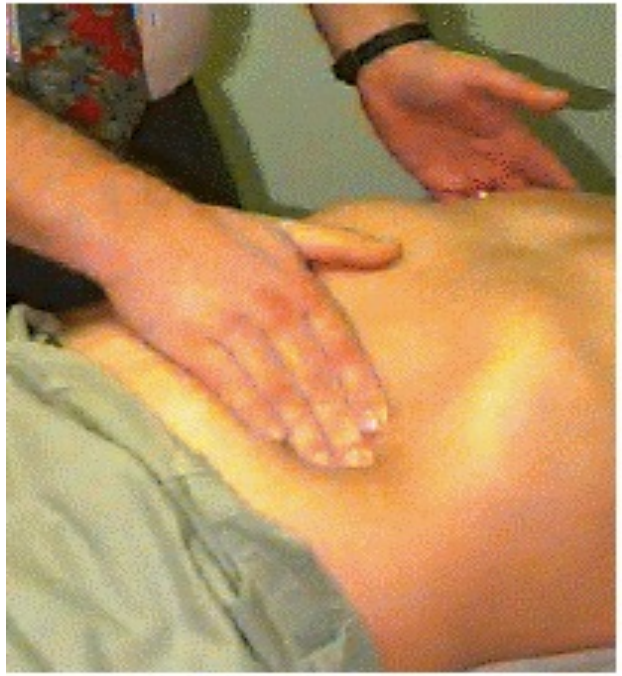
Palmar erythema

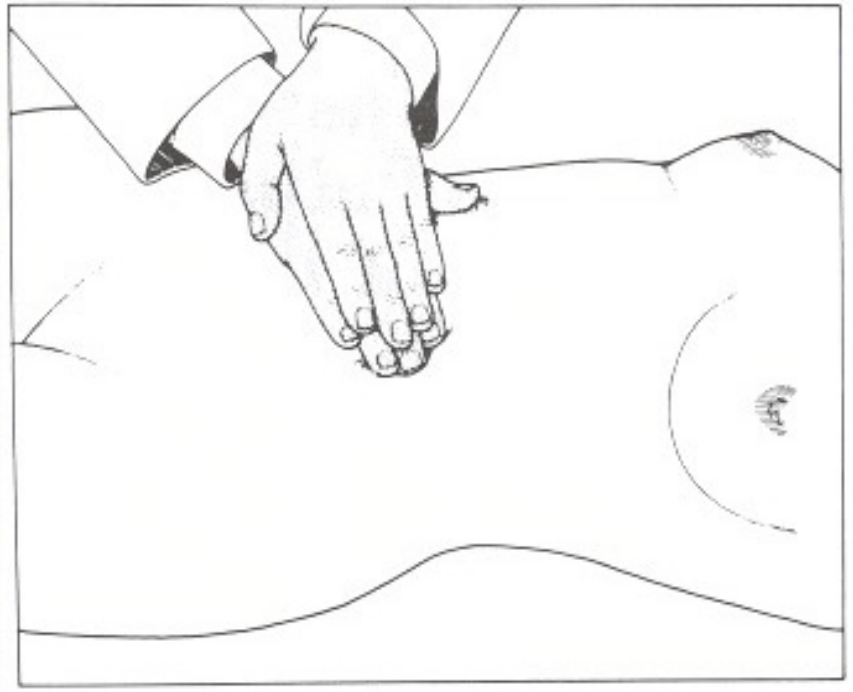
HANDS

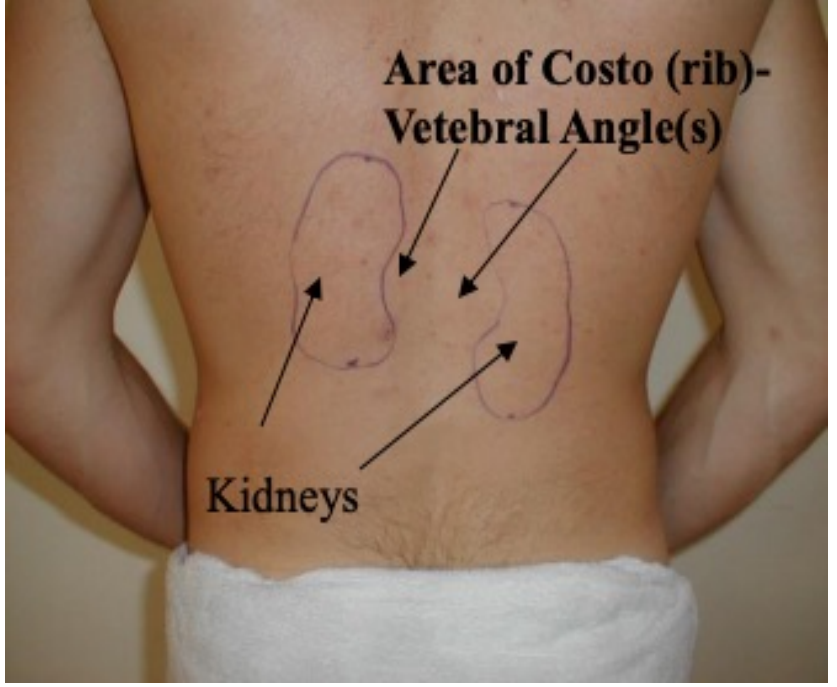
- Nails
  - Clubbing
  - Koilonychia
  - Leuconychia
- Palmar erythema
- Dupuytren's contractures
- Hepatic flap

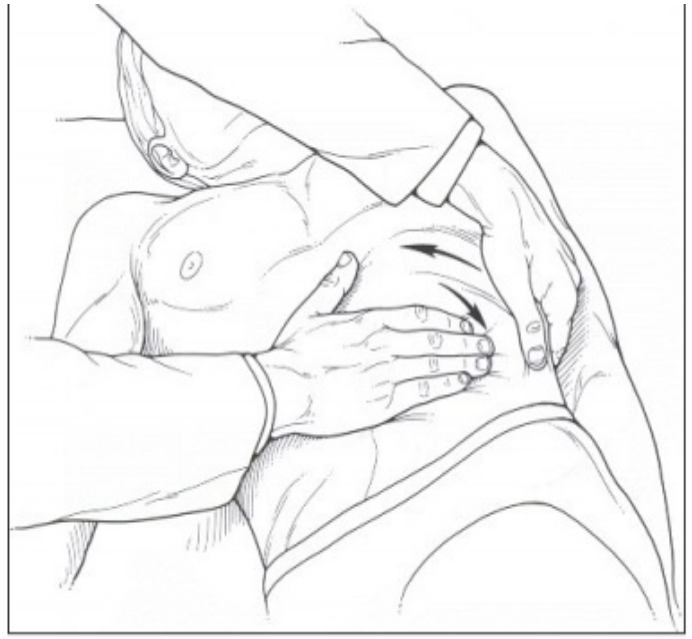


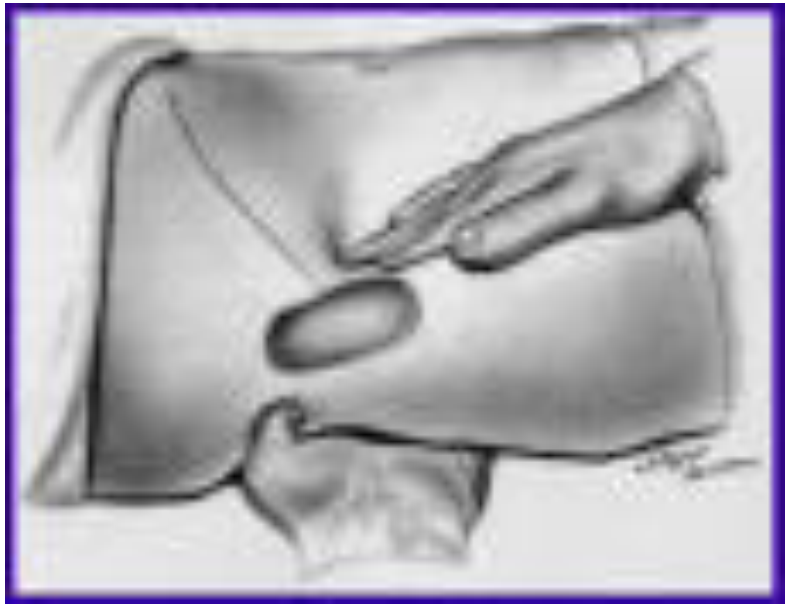
Pictures clockwise: jaundice in eye, caput medosa, arms , palmar erythema, abnormal fingers.





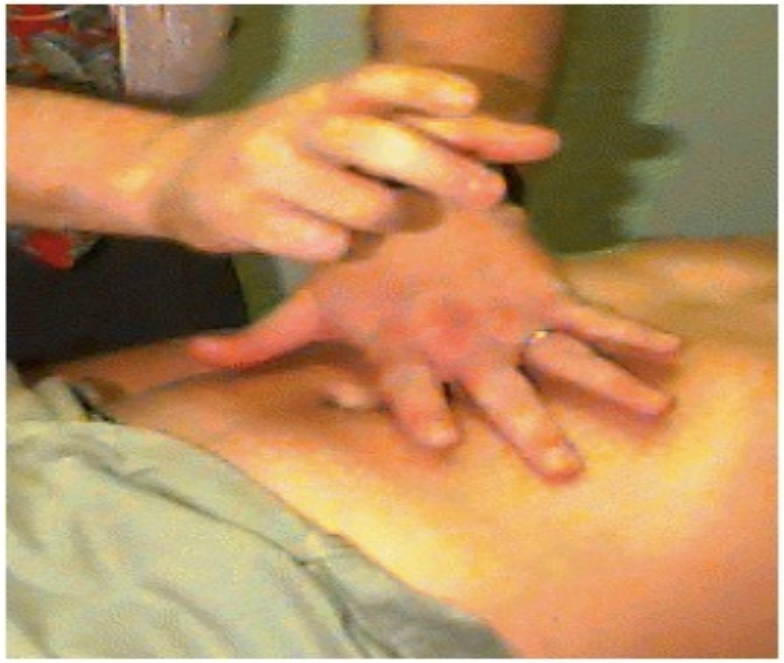


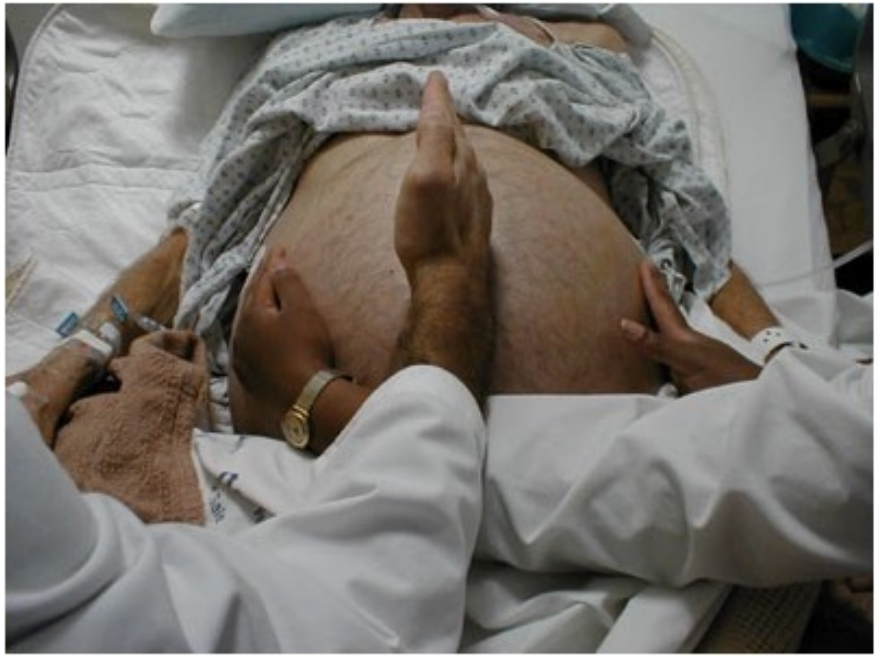




PICTURES CLOCKWISE:

Superficial palpation, →deep palpation (double handed),→ susrgical anatomy of renal angles, →plapation of renal angles





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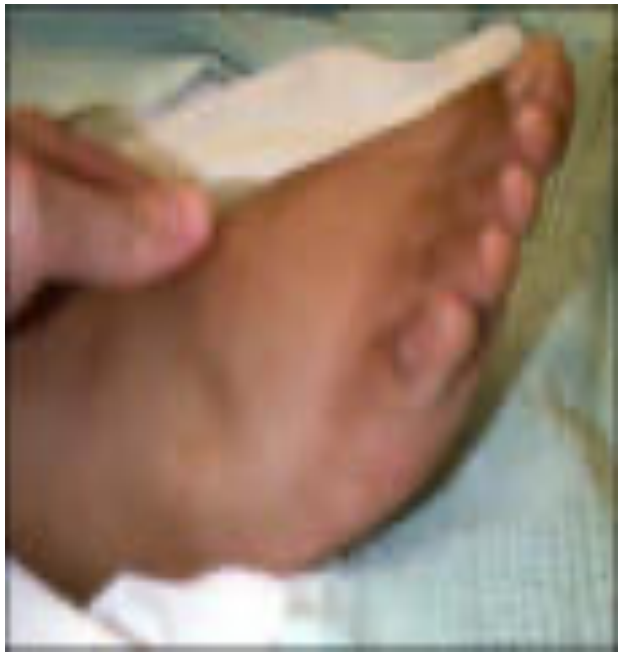
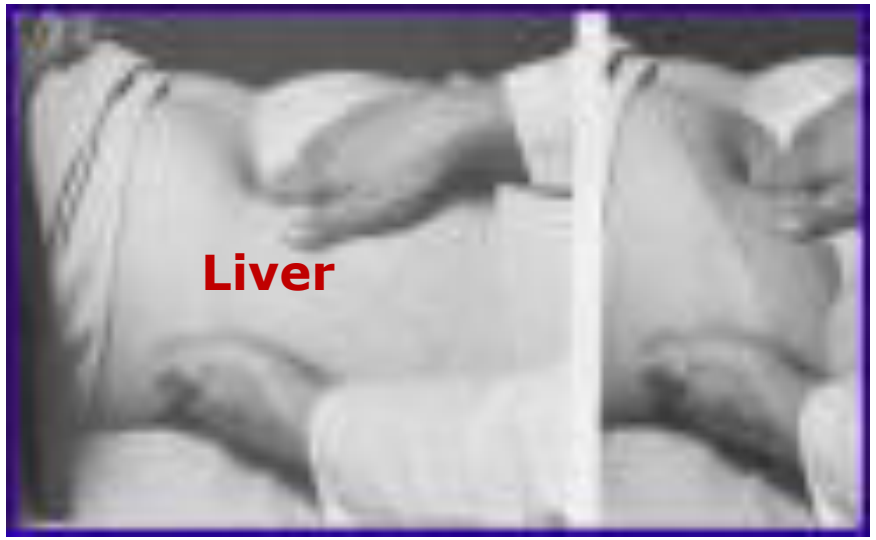
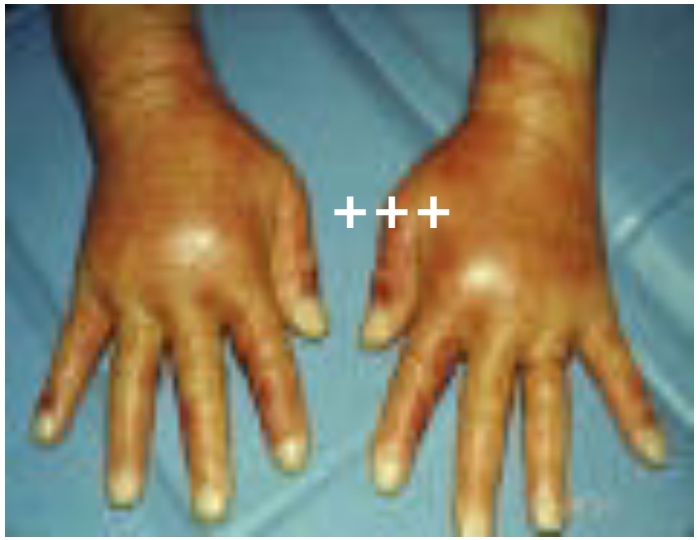






PICTURES CLOCKWISE:

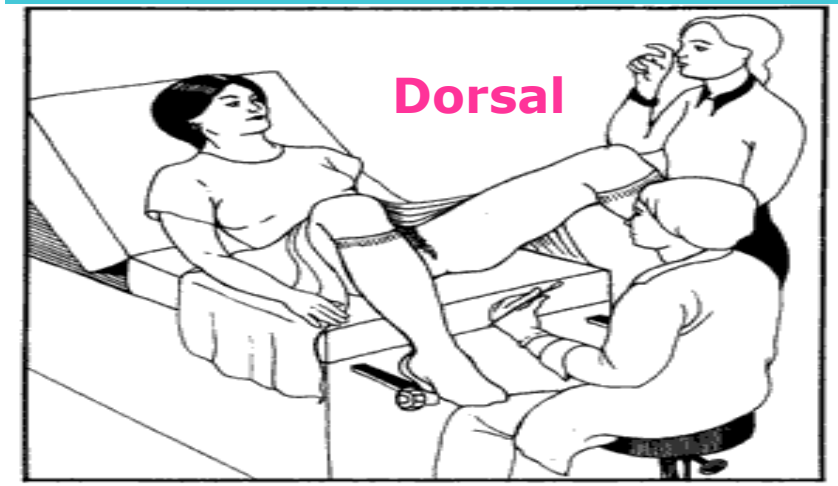
Percussion ,→ edema foot,→ shifting dullness, → palpation of liver ,→ edema hands

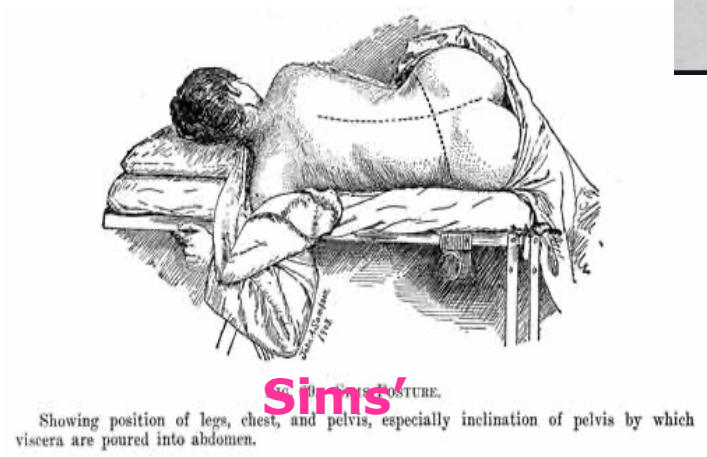
LOCAL GYNECOLOGICAL EXAMINATION

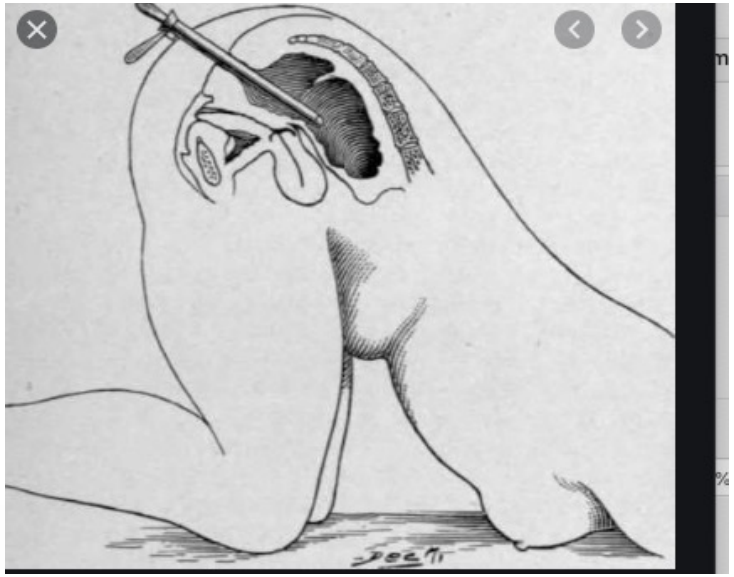
Includes; the sequence of steps may be changed according to cases;

1. **vulvar inspection**
2. **vaginal palpation (P/V)**
3. **Bimanual examination**
4. **speculum examination**
5. **special clinical (not routine), under certain circumstances.**

LOCAL GYNECOLOGICAL EXAMINATION
POSITIONS

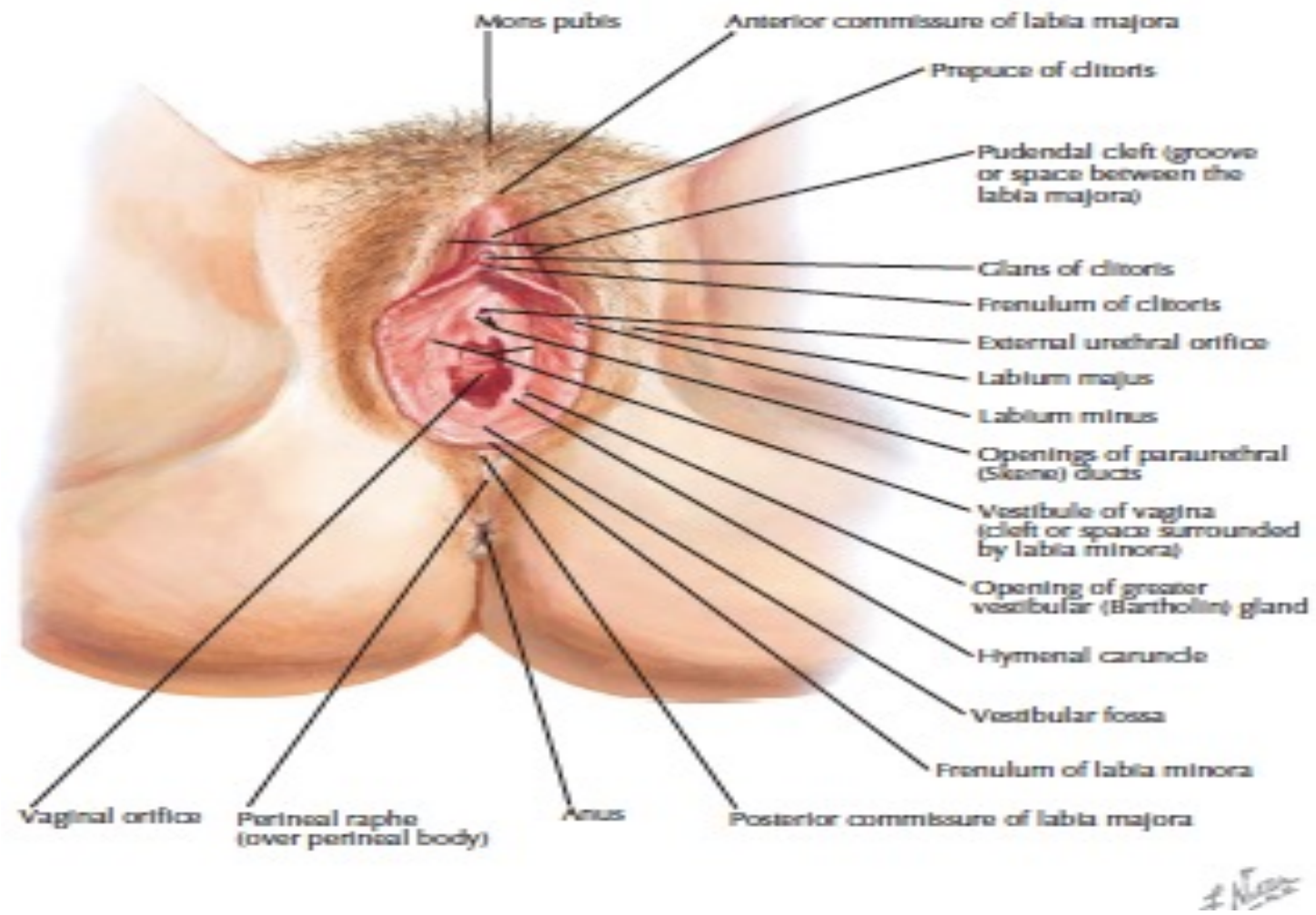






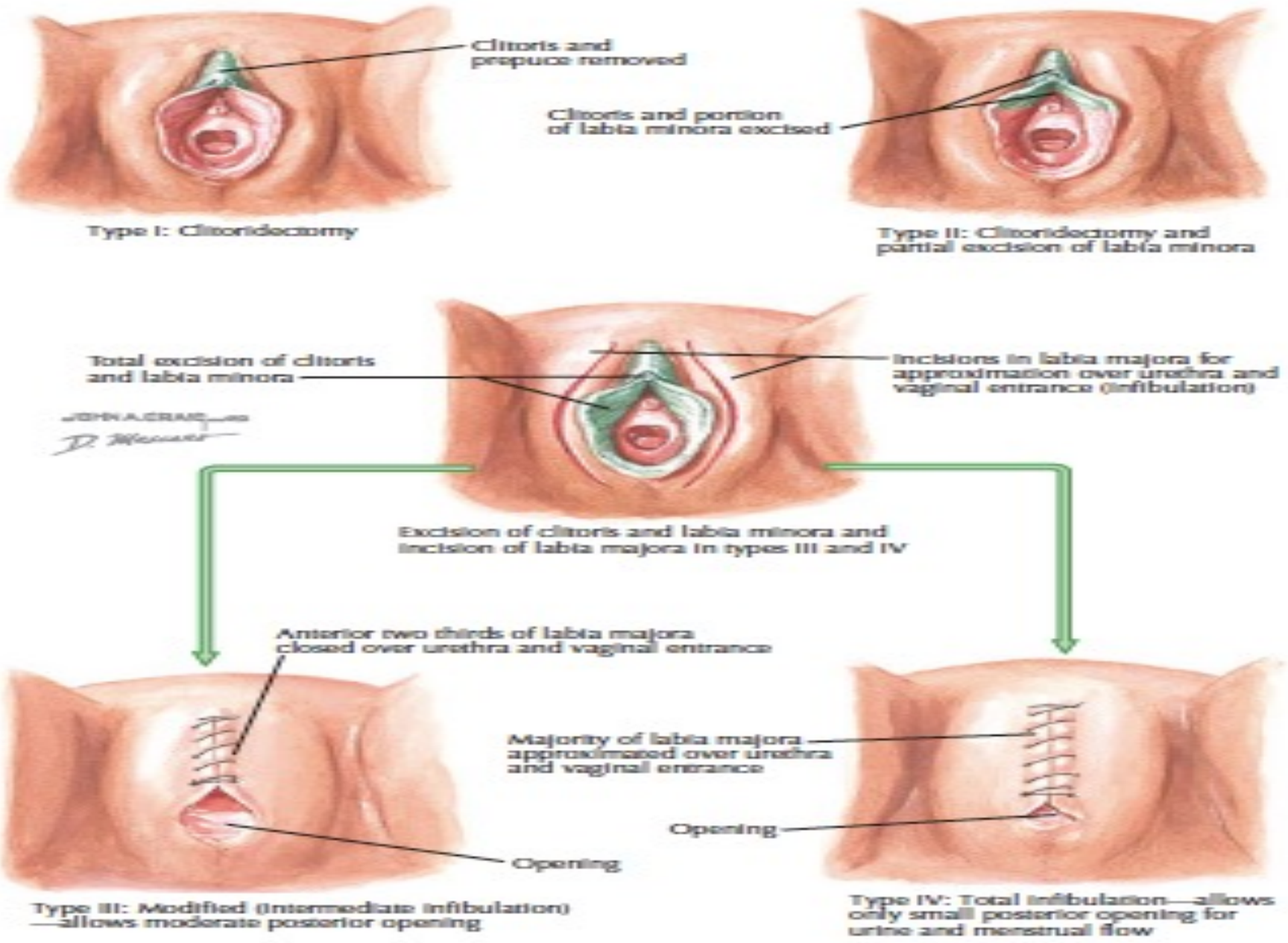
Vulvar inspection:

PERINEUM & EXTERNAL GENITALIA

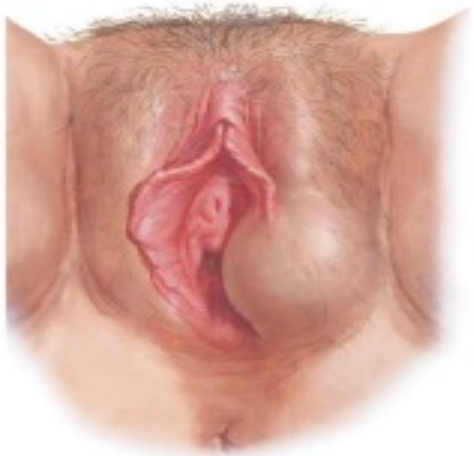


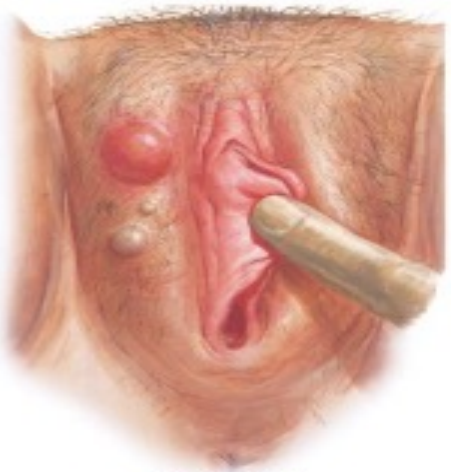
Vulvar inspection

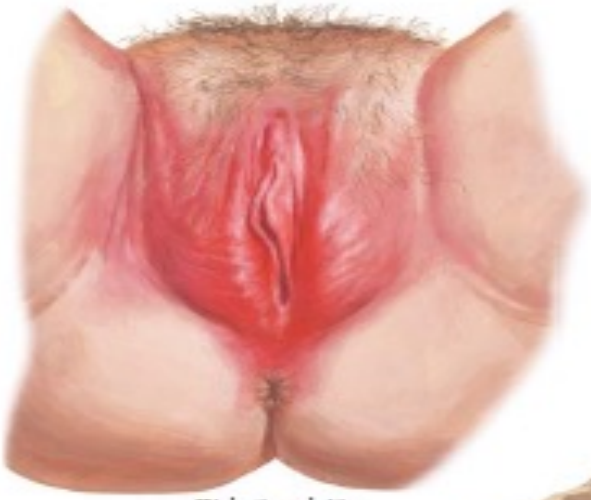
Female circumcision

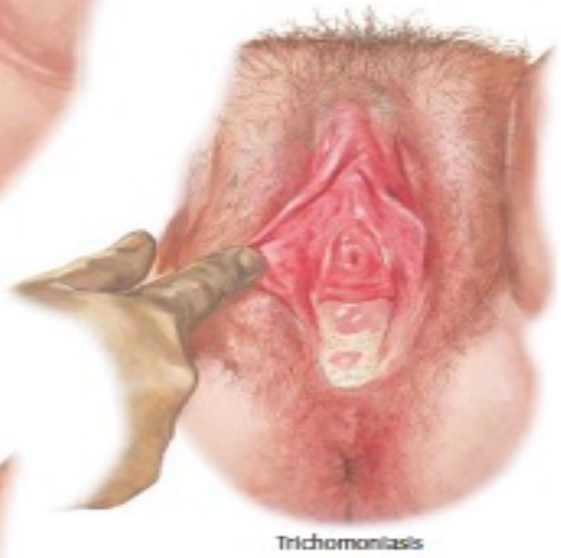


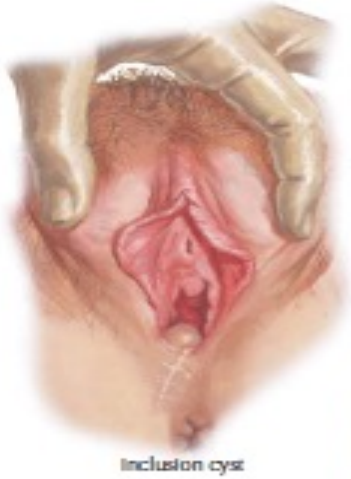
Vulvar inspection

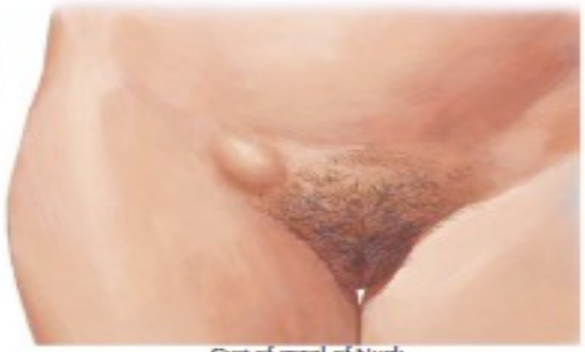

Bartholin cyst

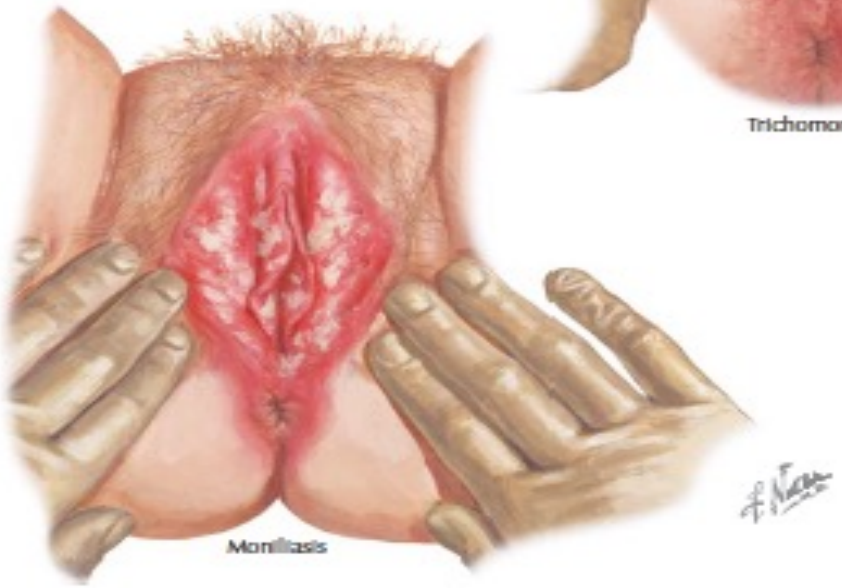

Sebaceous cyst


Diabetic vulvitis

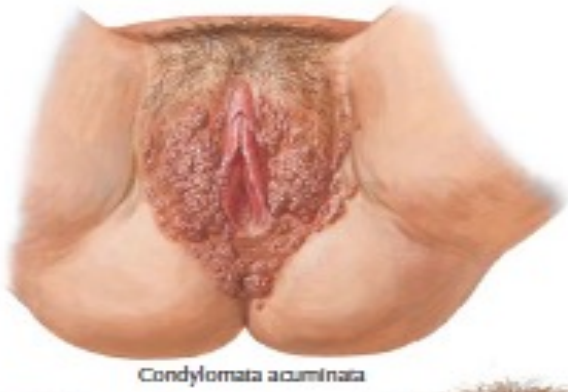

Trichomoniasis


Inclusion cyst

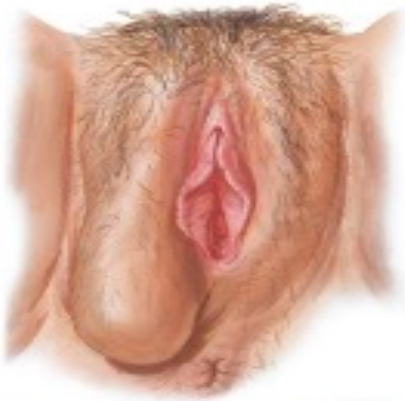

Cyst of canal of Nuck


Moniliasis

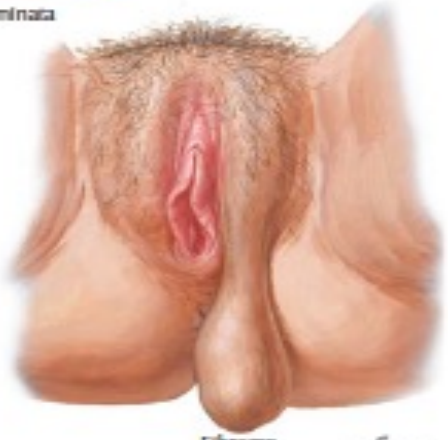
Vulvar inspection



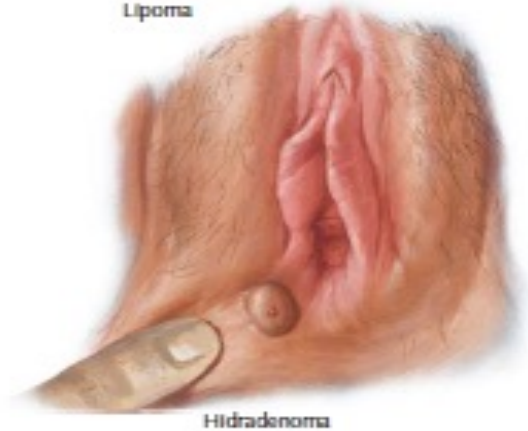
Condylomata acuminata



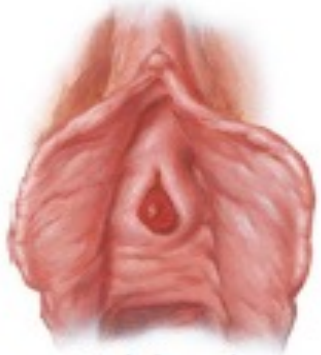
Lipoma



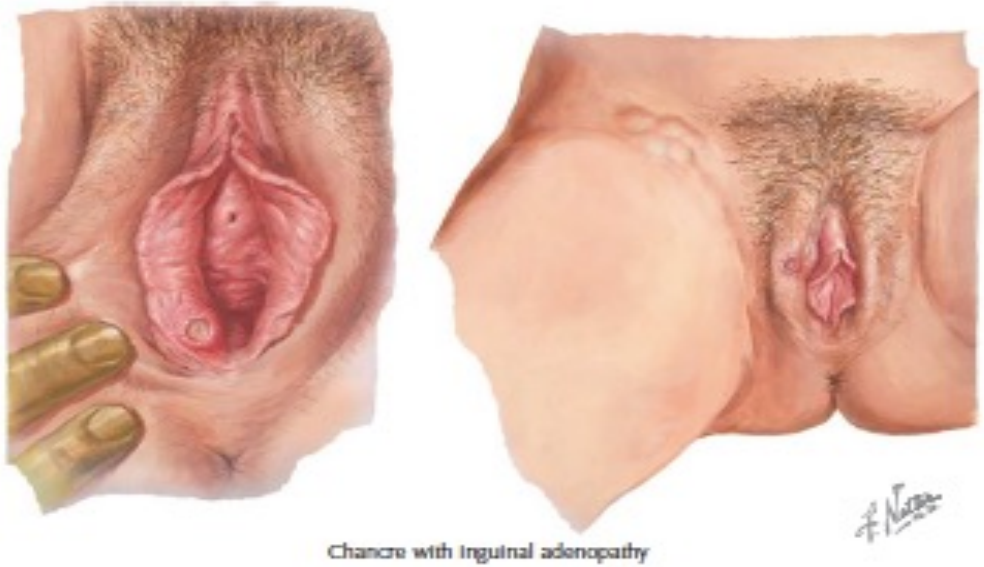
Fibroma



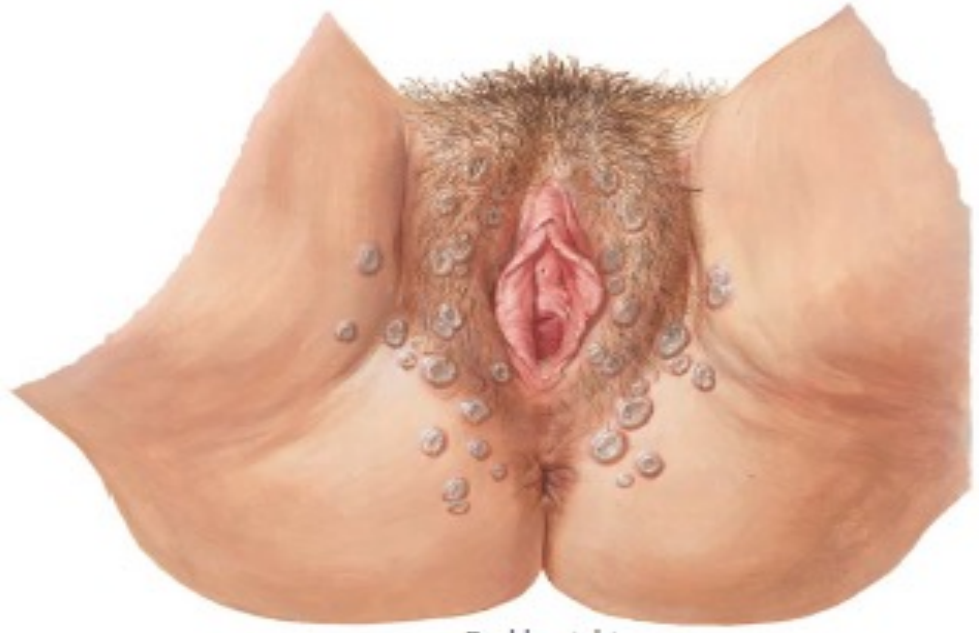
Hidradenoma



Urethral caruncle

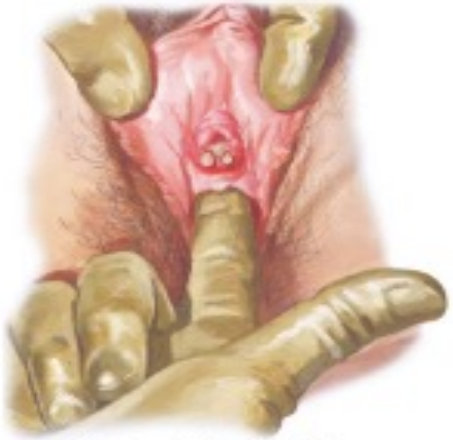


Chancre with inguinal adenopathy

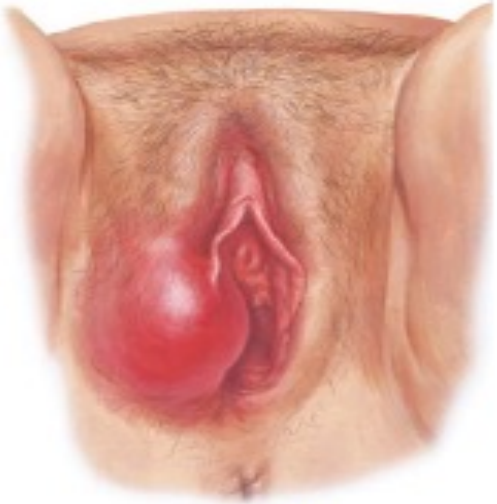


Condylomata lata

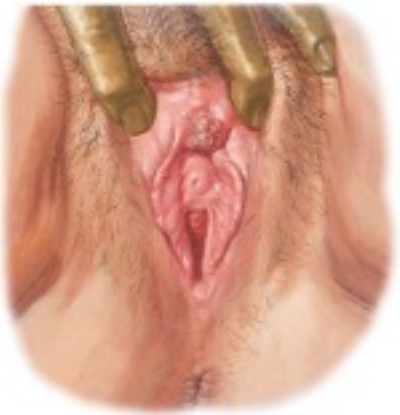
Vulvar inspection



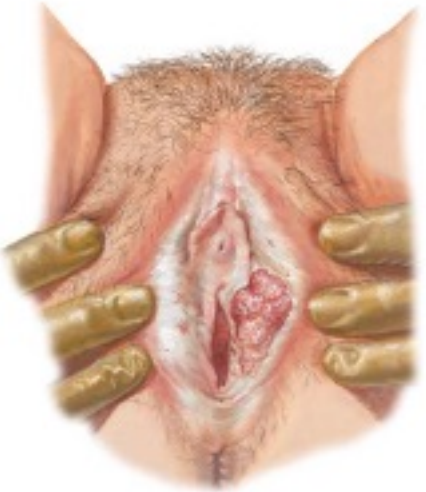
Acute urethritis and skenitis



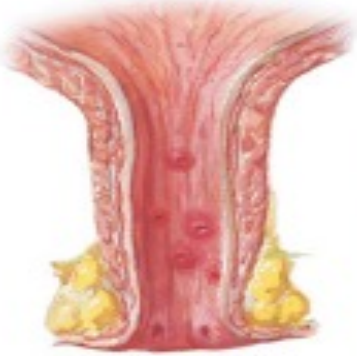
Bartholin abscess



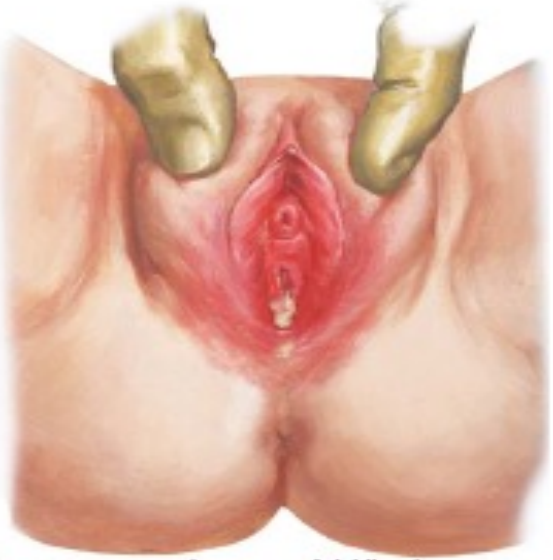
Carcinoma of the clitoris



Carcinoma on leukoplakia

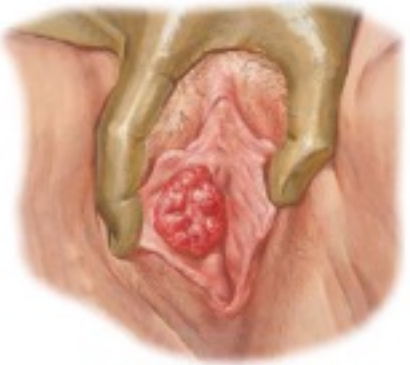


Chronic urethritis with
Infection of urethral glands

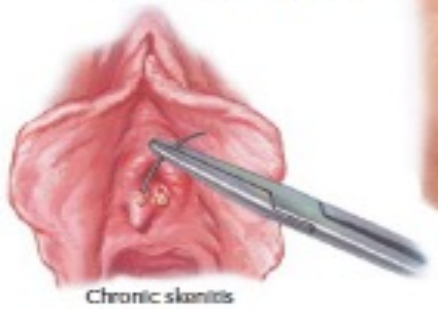


Vulvovaginitis of childhood

Sarcoma of the labium

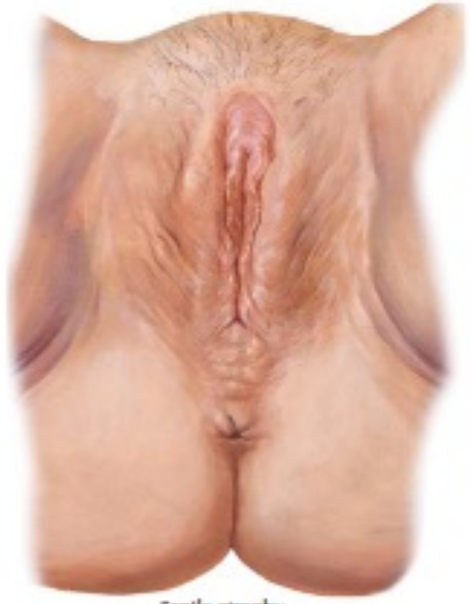


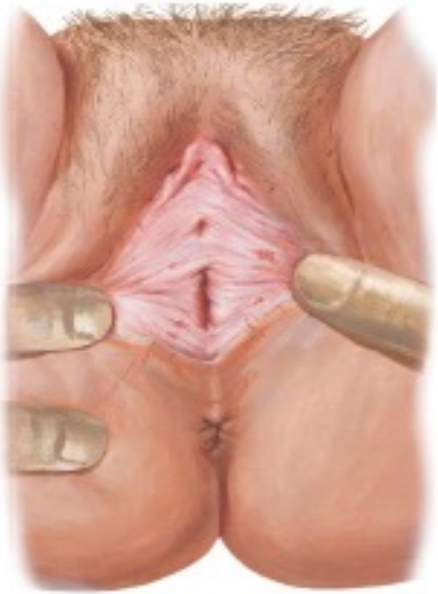
Metastatic hypernephroma

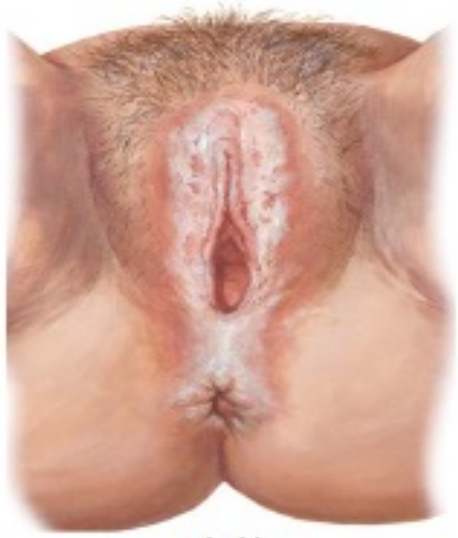


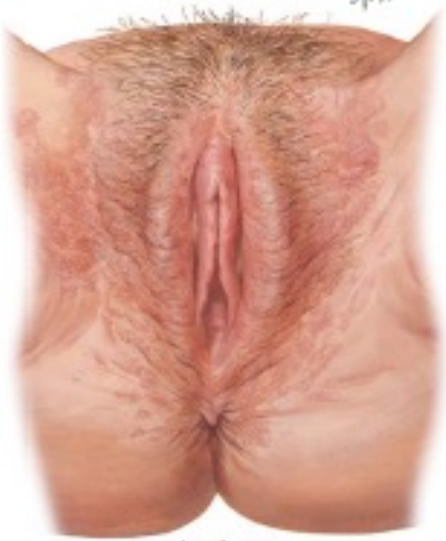
Chronic skenitis

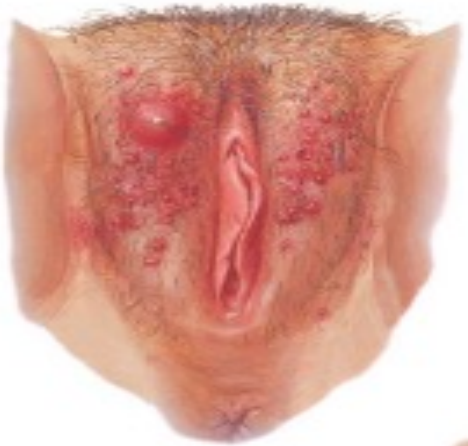
Vulvar inspection

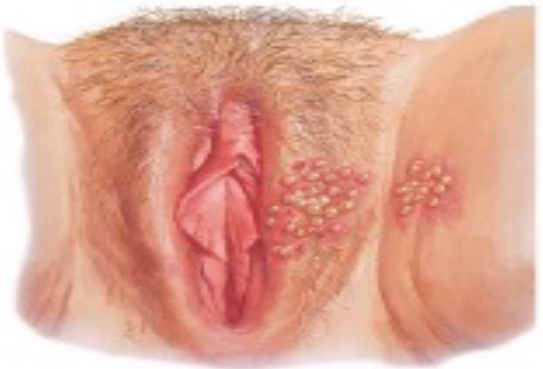

Senile atrophy

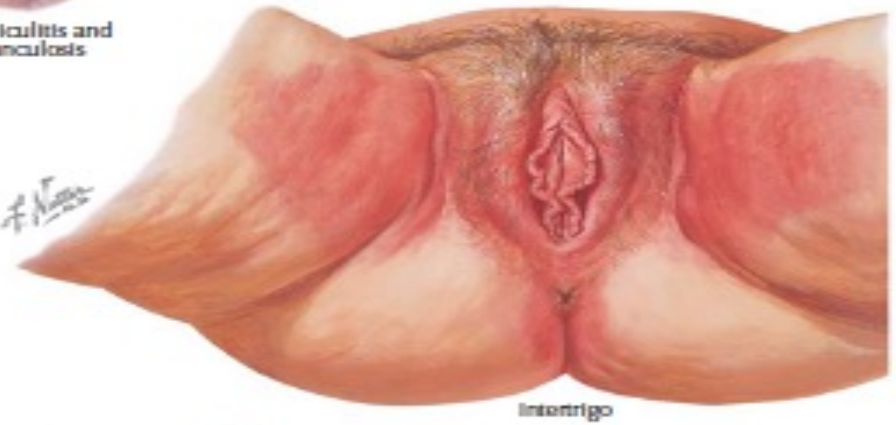

Kraurosis vulvae

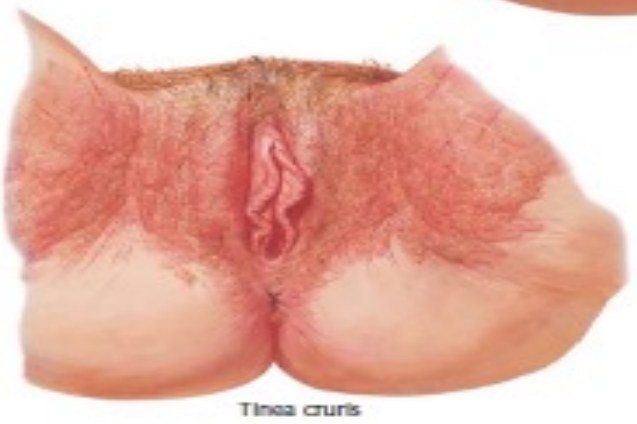

Leukoplakia

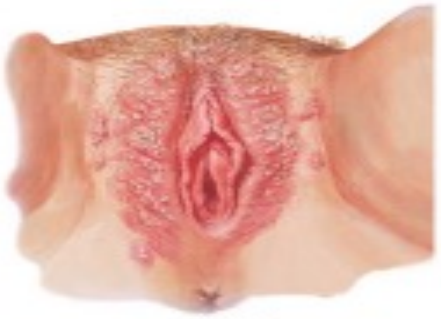

Lichenification


Folliculitis and furunculosis

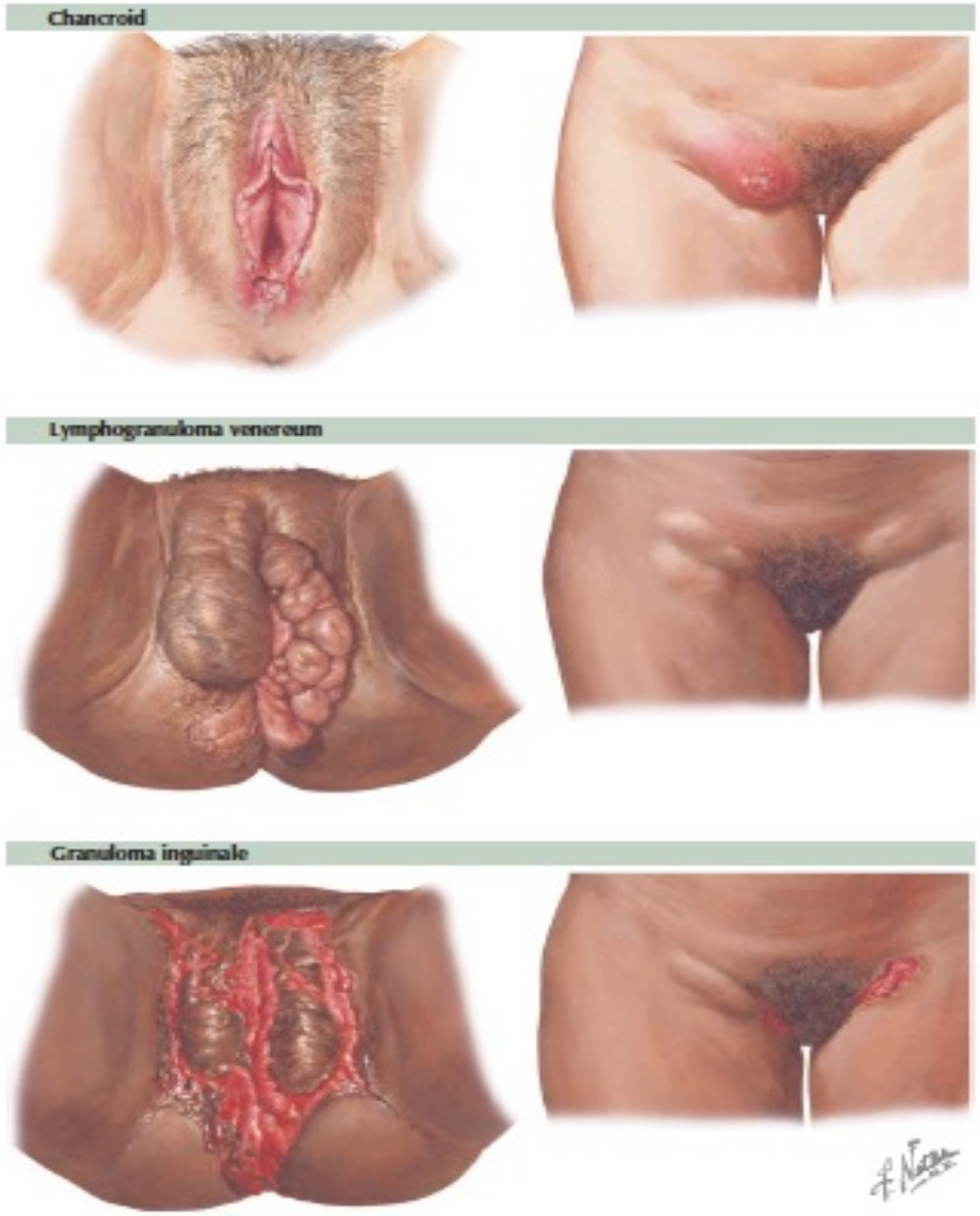

Herpes genitalis

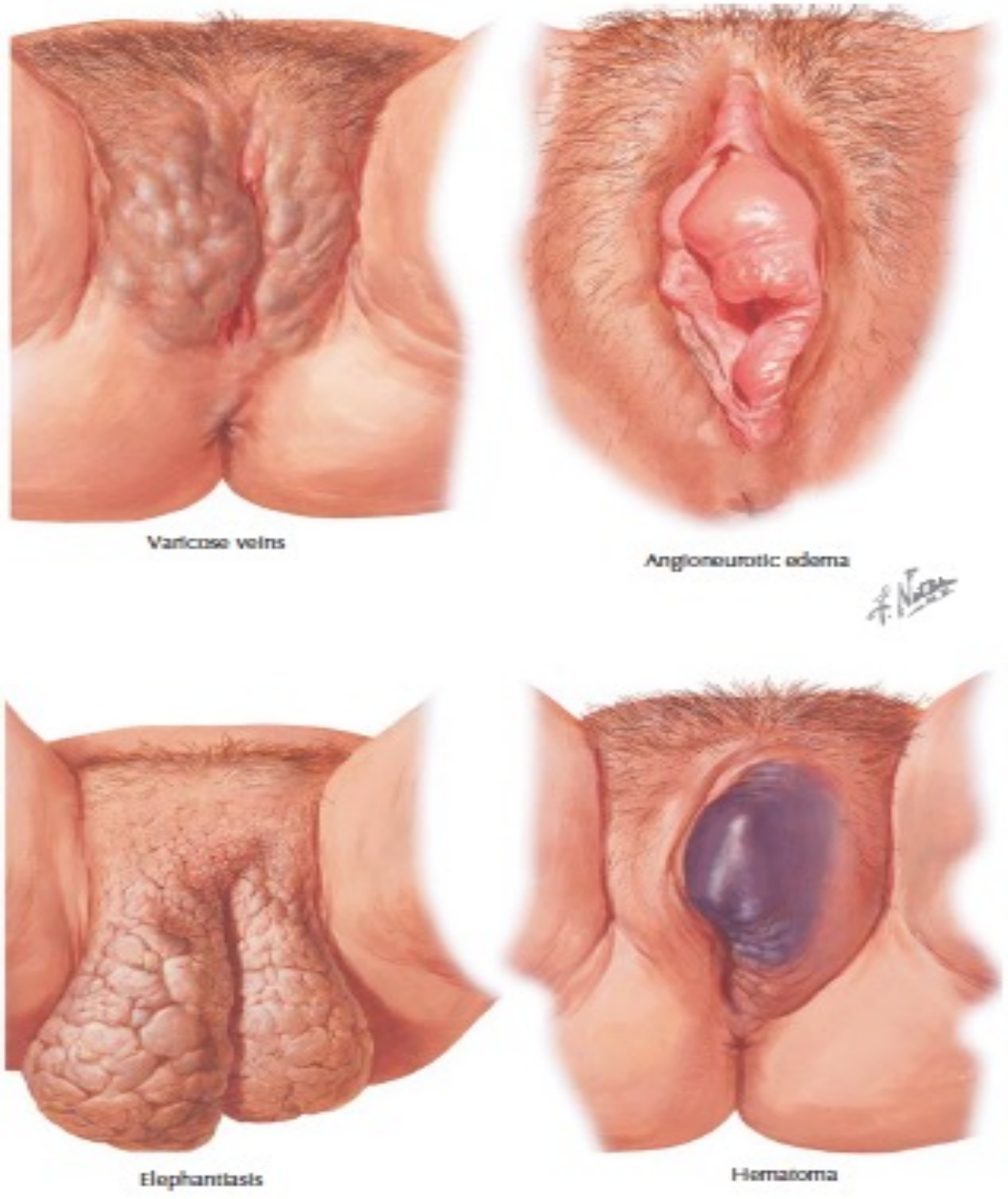

Intertrigo


Tinea cruris


Psoriasis

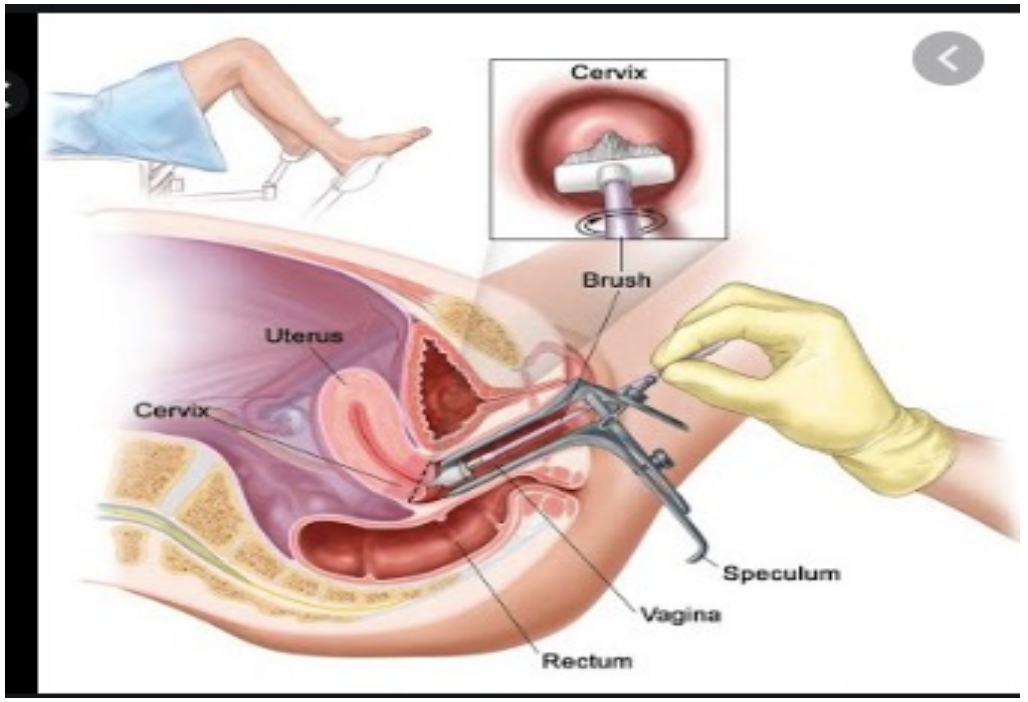
Vulvar inspection

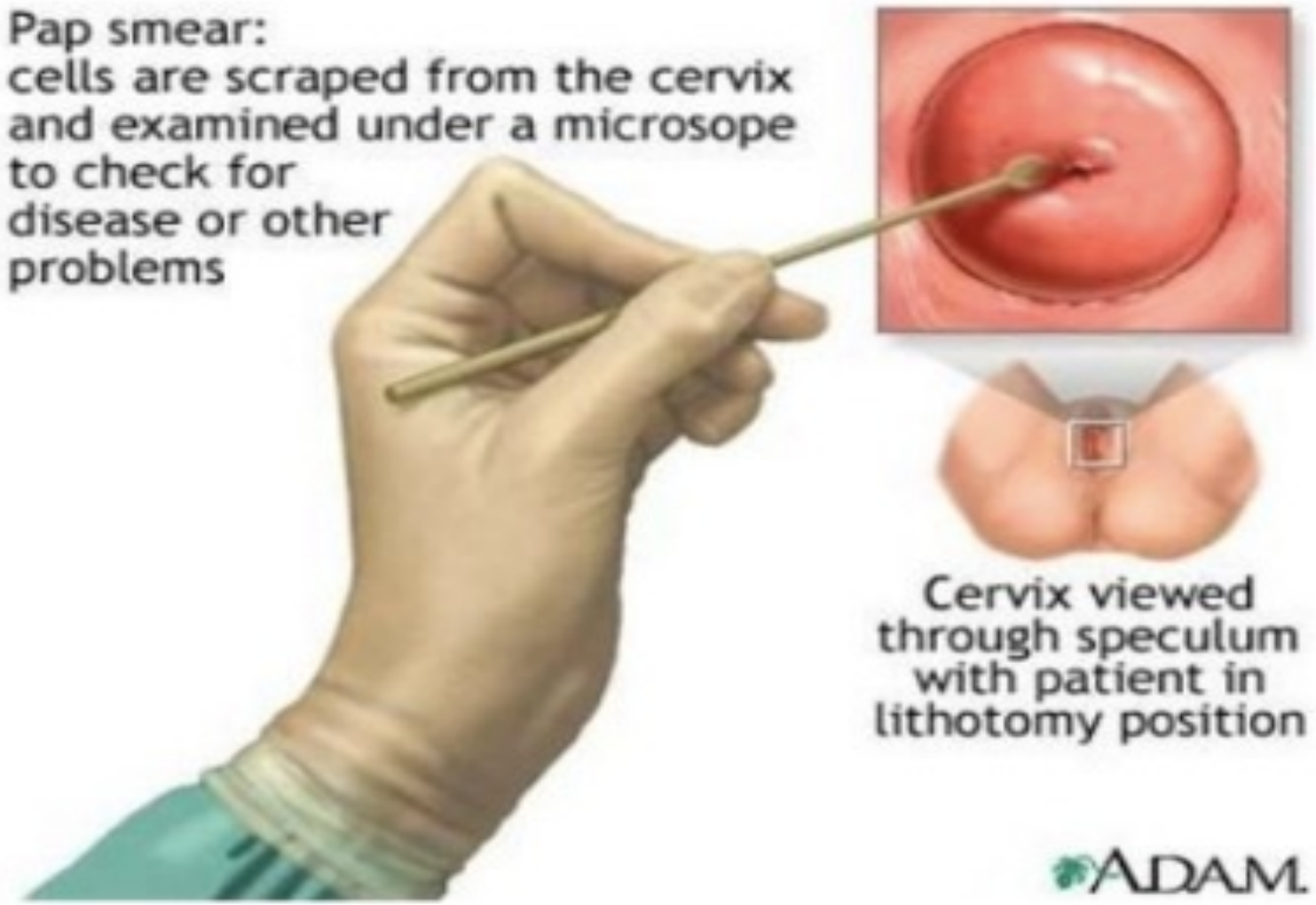




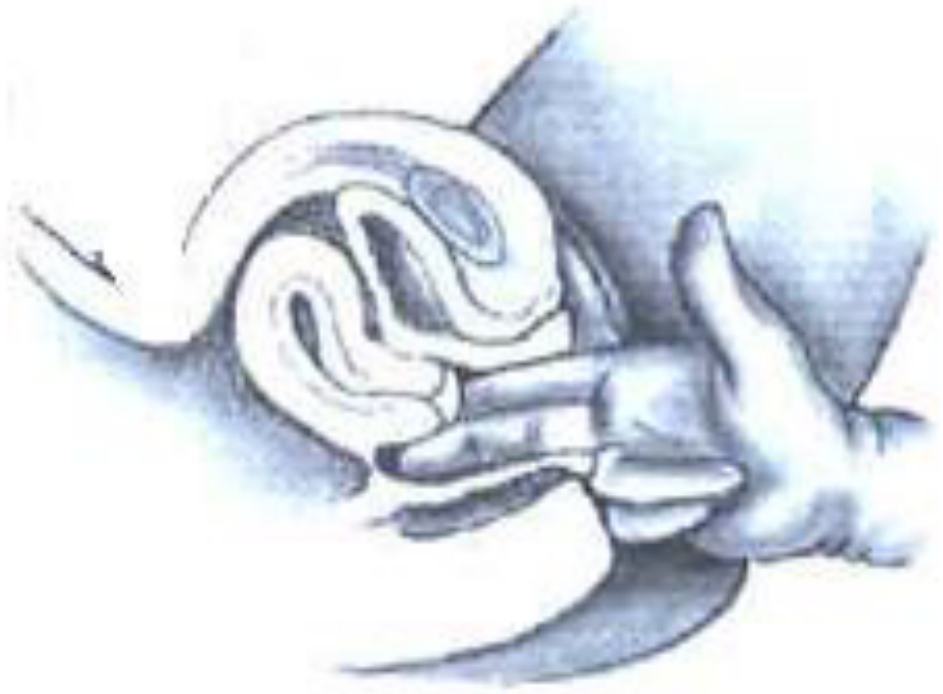
TAKING A VAGINAL OR CERVICAL SMEAR /SWAB

- In some cases we find ourselves obliged to take a vaginal or cervical swabs, or smears before doing per vaginal examination



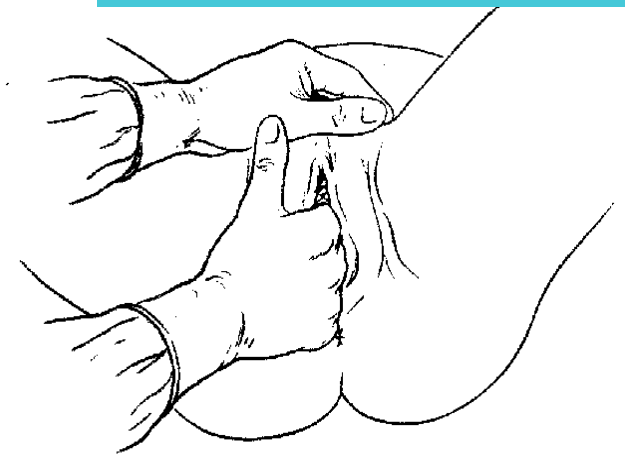

Pap smear:
cells are scraped from the cervix
and examined under a microsope
to check for
disease or other
problems
Cervix viewed
through speculum
with patient in
lithotomy position
ADAM.

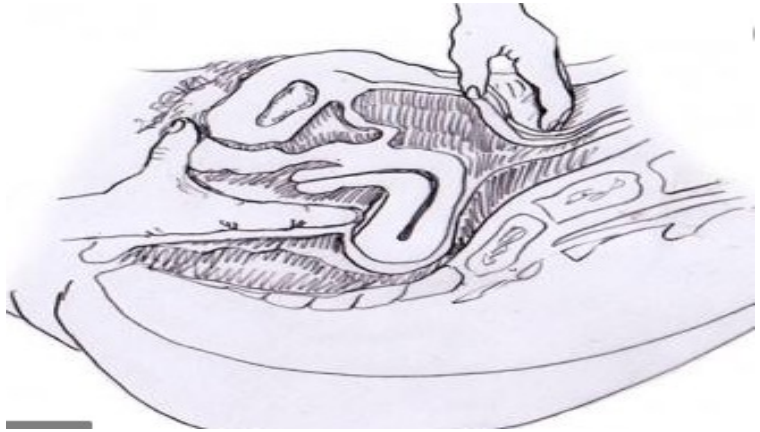
Digital Vaginal Palpation (P/V)

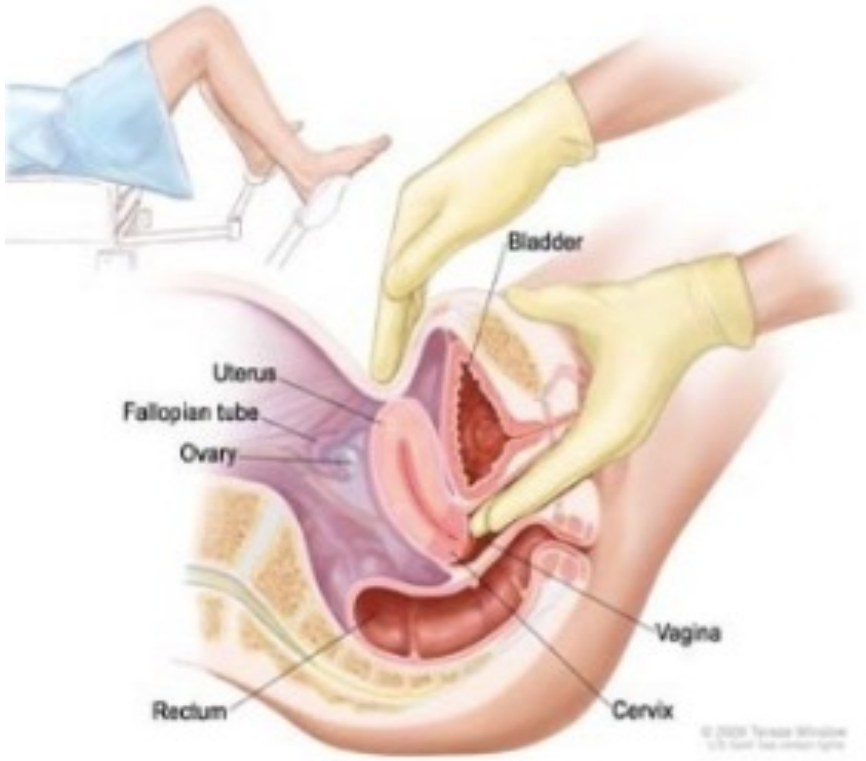


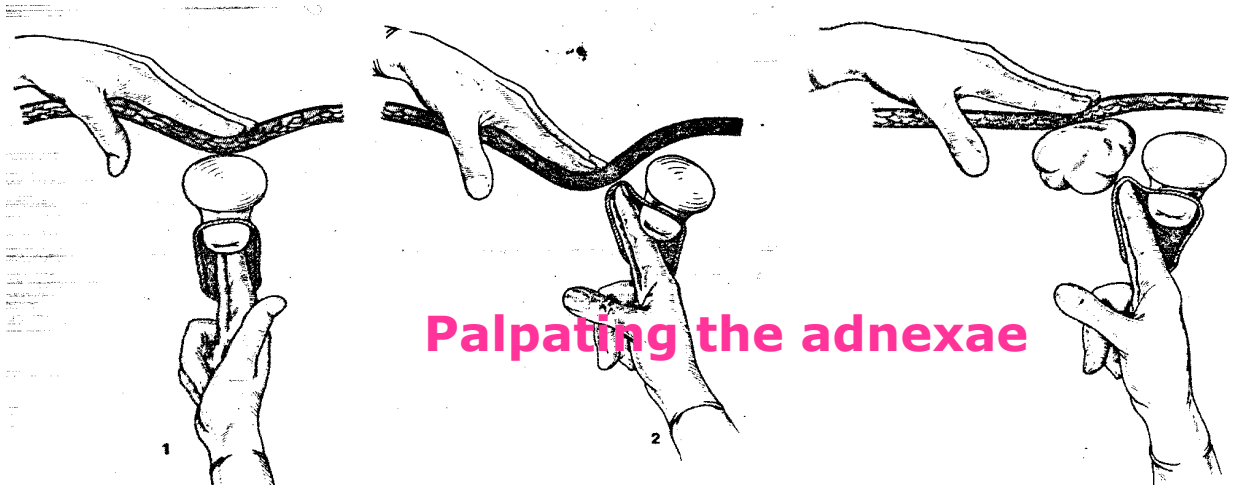
P/V examination is done by the index & middle fingers of the examining hand , first introduced edgewise unil the middle of the vagina then turned by 90 degrees to palpate the vaginal walls anterior, posterior and lateral walls as will as the porio vaginals of the cervix.

Bimanual Examination



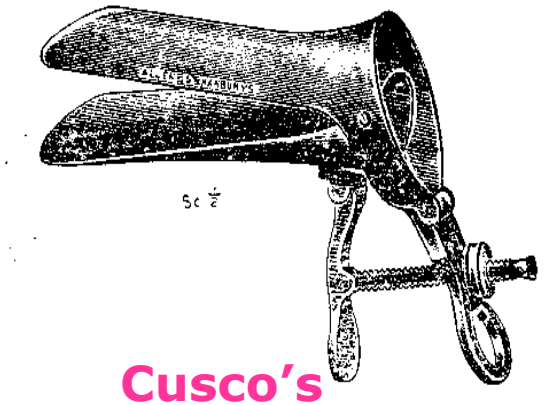




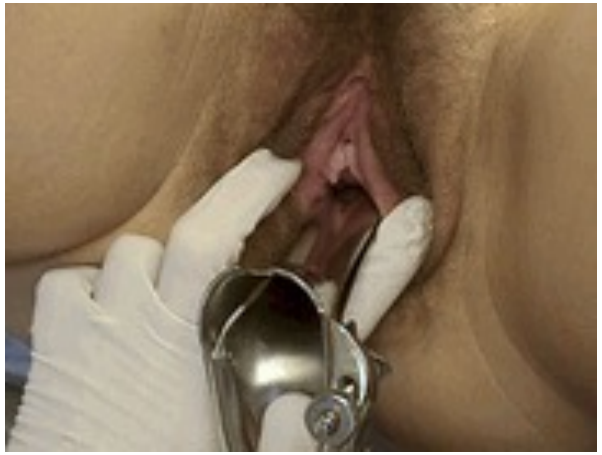


Palpating the adnexae

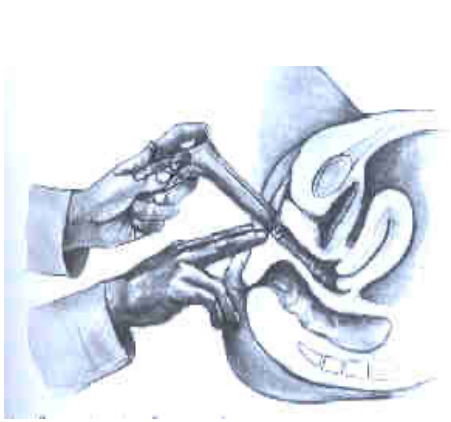
SPECULUM EXAM

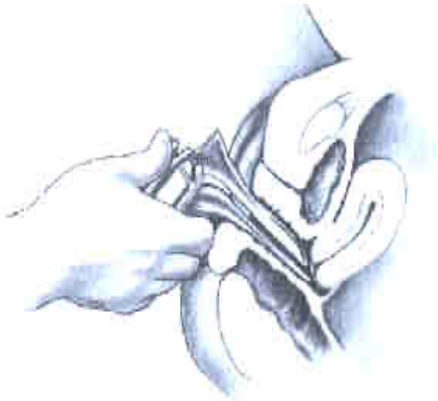


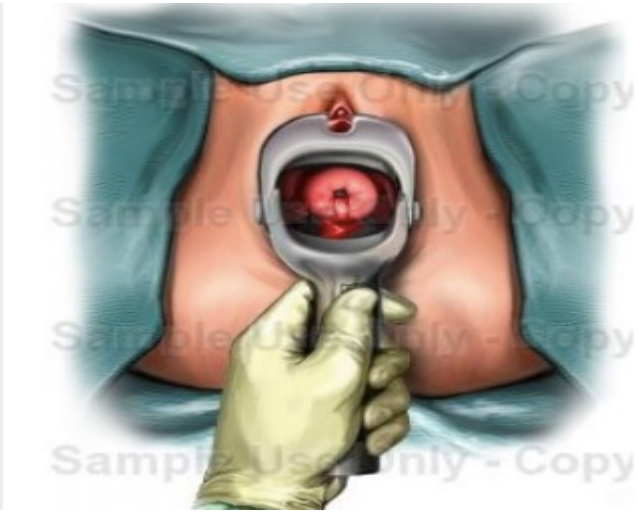
Cusco's



Sims'



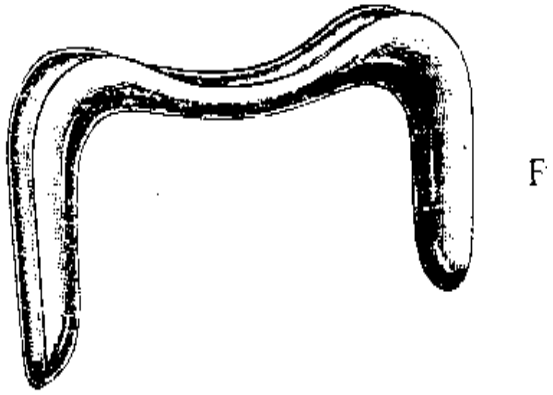


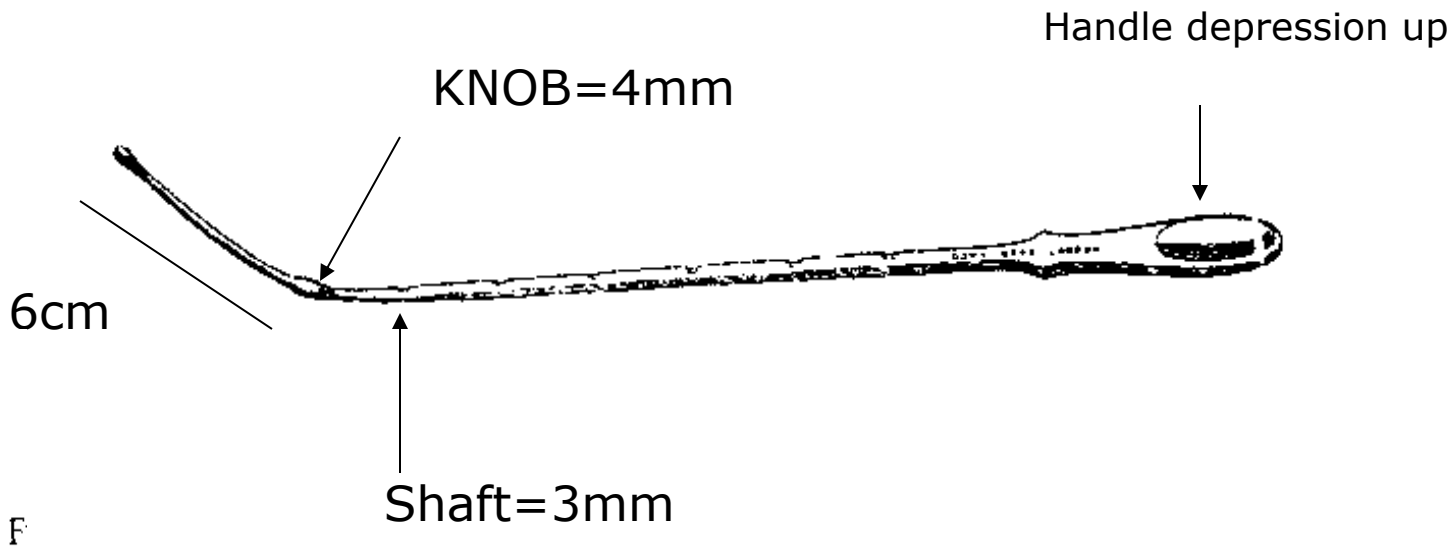


Inserting speculum

SOUNDING

What are indications?





Uterine sounding; indication

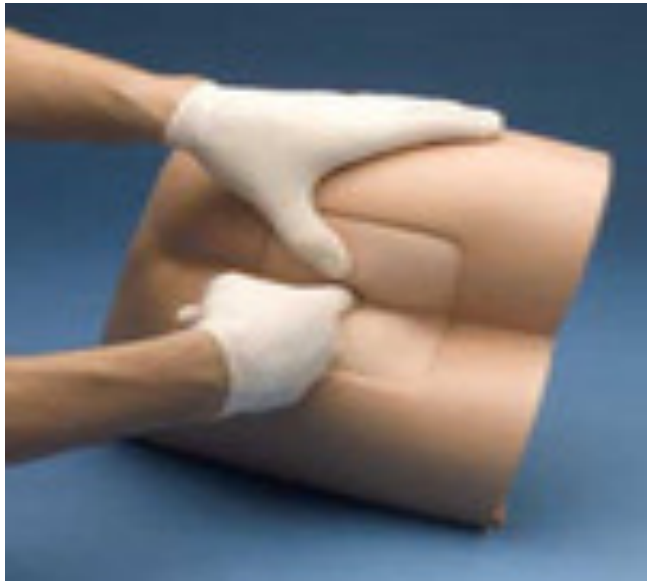
1. **Measurement of the length of the cervico-uterine canal.**
2. **Determination of the direction of the uterus [AVF or RVF].**
3. **To differentiate uterine *inversion* from *sub-mucous* fibroid.**
4. **To differentiate sub mucous fibroid polyp (originating from the fundus) and cervical fibroid polyp.**
5. **Determination of the relationship of the uterus to any pelvic mass.**
6. **In cases of prolapse it differentiate true prolapse from congenital elongation of the portio vaginalis of the cervix. Also it diagnoses supra-vaginal elongation of the cervix in vagino-uterine prolapse.**
7. **Diagnosis of intrauterine masses e.g. sub-mucous fibroid, uterine septum, bicornuate uterus [this findings are only suggestive and should be further investigated].**
8. **Diagnosis of intrauterine foreign body e.g. IUD. "click"**
9. **Probe test of friability for cancer cervix (Krobac's test).**
10. **Click test for diagnosis of vesico-vaginal or urethra-vaginal fistulas.**

Per rectum examination (P/R)

Rectal examination is indicated in gynecology in the following conditions:

1.Pelvic examination in a *virgin* it substitutes P/V, and bimanual examination for evaluation of the uterus,
adnexa, or pelvic masses.

1. Diagnosis of para-metrial infiltration in cancer cervix.
2. Detection of mass in cul-de-sac.
3. Diagnosis of rectal infiltration in gynecologic malignancy.
4. Differentiation between true & false rectocele.
5. Diagnosis of recto-vaginal fistula.

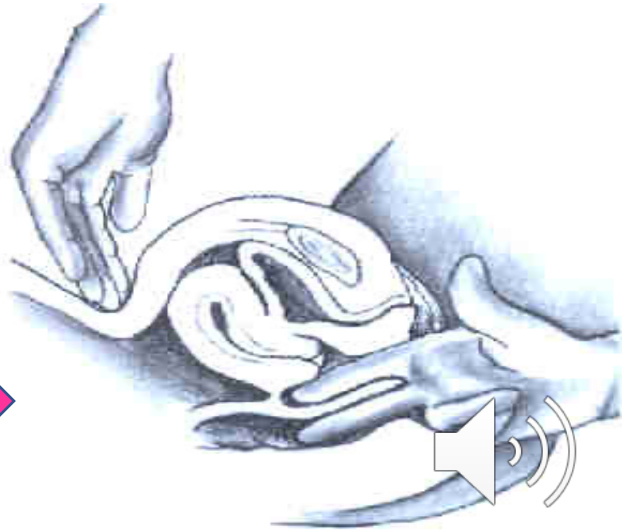


Rectovaginal exam

Recto-vaginal examination is indicated in the following conditions:

1. Evaluation of the recto-vaginal septum e.g.in endometriosis.
2. Diagnosis of enterocele (Malpas' test).
3. Evaluation of the tone of levator ani muscle in cases of prolapse pre-operatively.
4. Diagnosis of recto-vaginal fistula.

Rectovaginal septum between index& middle fingers



Clinical tests for urinary stress incontinence

1- Marshall stress test: with about 200 ml of urine in the bladder (=some desire to urinate), the patient is asked to cough, a positive test is indicated if there is a brief spurt of urine loss limited to the period of increased intra-abdominal pressure. If the test is negative in supine position, it should be repeated in standing position

2- Yousef's test: this test is done to detect inhibited incontinence in cases of genital prolapse i.e. the patient has prolapse & she is continent. With the use of a volsellum on the anterior cervical lip, the bladder neck is pushed upwards, and the patient is asked to cough. If the urine comes down through the urethra, the patient has inhibited incontinence that must corrected during repair of prolapse and vice versa.

Clinical tests for urinary stress incontinence

3– **Bonney's test**: this test is done in patients with prolapse & urinary incontinence to differentiate between incontinence due to descent of bladder neck (prolapse) and that due to intrinsic sphencteric weakness. Two fingers are put in the vagina to push the bladder neck upwards, and the patient is asked to cough. If the urine comes out the urethra, there is weakness of the sphincter. If no urine comes out, the incontinence is due to prolapse (inhibited by correction of the bladder neck). Another possibility is that the incontinence is inhibited due to urethral compression by the vaginal fingers. [*the next 3 tests were designed to avoid this misleading possibility*].

Clinical tests for urinary stress incontinence

4- Marshall- Marchetti test:

it is exactly as Bonney's test but using Allis forceps to elevate the bladder neck instead of fingers to avoid urethral compression.

5- **Hodge-Smith pessary test**: it is exactly as Bonney's test but the bladder base is elevated by inverted Hodge-Smith pessary.

6- Hodge-Linson test: it is exactly as Bonney's test, but the bladder base is elevated by the largest contraceptive diaphragm.

7- **Pad test**: it is done when all other tests fail to prove stress incontinence. A pre-weighed vulvar pad is applied, and the patient is allowed to perform her usual activities for *one* hour, then the pad is taken off & weighed. Any increase in the weight of the pad (urine loss) is observed. The one-hour pad test is the most commonly used pad test (international continence society [ICS], 1979).

8- Q-tip test (cotton swab test): the direction of the urethra is detected by a metallic catheter or by a lubricated cotton swab. Normally, the urethra goes up by about 15 degrees with the horizon. In stress incontinence the angle is increased (+/- 50 degrees) and this angle is further increased with straining.

Clinical tests or procedures used in cases of pelvic mass:

- *To differentiate pelvi-abdominal from purely abdominal swelling*: this is done abdominally by trying to get below the lower border of the mass. If the lower border is reachable, the mass is purely abdominal & vice versa.
- *To differentiate large ovarian cyst from ascites:* by doing shifting dullness; in ascites shifting dullness is positive, while in ovarian cyst dullness is constantly central with absent dullness in the flanks when the patient turned on her side.

To differentiate uterine from adnexal masses: during bimanual exam

Criteria of uterine & adnexal mass during bimanual exam.

Character	Uterine mass	Adnexal mass
1- Position	Usually central	Usually lateral
2- Transmission of movement to cervix	Present	Absent .
3- sulcus between the mass & uterus	Absent .	Present .
4-Consistency	Mostly solid	Cystic or solid

Clinical tests to diagnose V.V.F:

(1)Intravesical dye test:

The urinary bladder is filled with diluted solution of methylene blue or indigocarmine . careful inspection of the anterior vaginal wall & the vaginal vault with Sims' speculum for the colored urine.

(2) Three tampoon test of Moir:

Three vaginal tampons (or cotton balls) are placed one after the other. Bladder is filled with diluted methylene blue solution. The patient is asked to walk for 10-15 minutes. Then the tampons are removed & examined for the colored solution (blue); if the lowest tampon is the only colored one, there is no fistula but there may be transurethral urinary incontinence (stress or urge). If the upper tampon is wet & stained blue, there is a vesico-vaginal fistula. If the upper one is wet but not stained blue, there is a uretro-vaginal fistula.

(3) Flat tire test:

The patient is put in the knee-chest position, and the vagina is filled with water or saline. Intravesical instillation of air or CO2 through a urethral catheter. Localization of the small fistula is done by visualization of gas bubbles in the vagina.

Clinical tests to diagnose recto–vaginal fistula:

- ***Probe test:*** **a small caliber probe is pushed through the vaginal orifice of the fistula can be felt on rectal examination.**
- ***Methylene blue test:*** **methylene blue instillation from the vaginal orifice can be seen in the rectum via a proctoscope.**
- ***Carey's test:*** **a Foley catheter (10ml balloon) is inserted into the anal canal while the vagina is painted with concenterated solution of soap & water. The balloon is inflated with 10ml saline to make the anus tight. As the rectum is ditended with air from a syringe attached to the Foley catheter, air bubbles in the vagina can locate the site of the fistula.**

Thank you

شكرا لحسن المتابعة