Obs & Gyne

HU MiniOSCE

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Gynecology

Gynecology Topics

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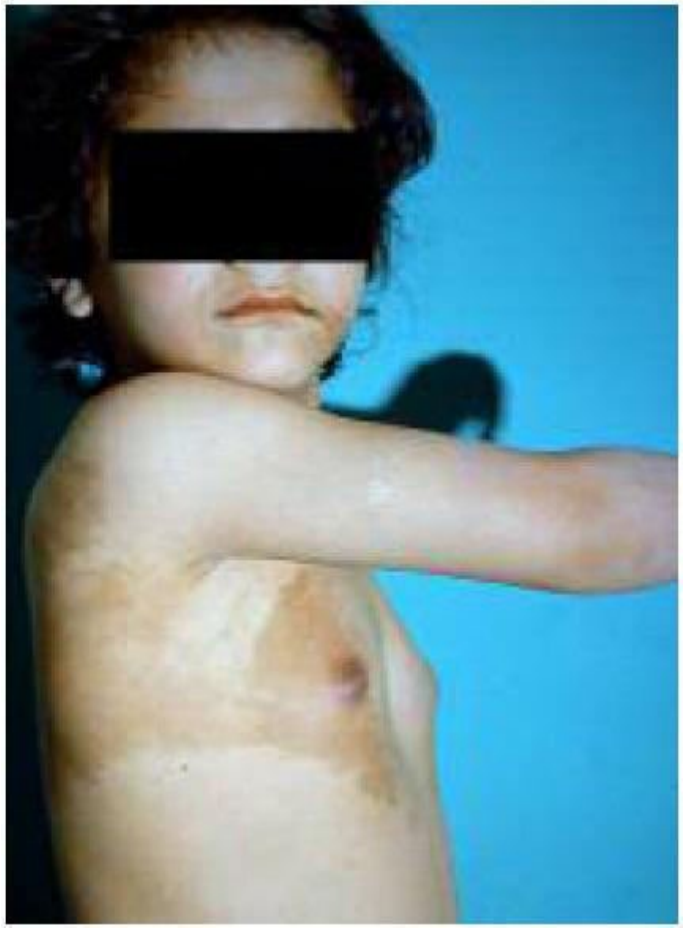
Puberty

Q: 8 y/o, her mother is complaining that her baby girl is showing early signs of puberty:

1. Define Precocious Puberty?

- Onset of pubertal development before the age 8 in girls & 9 in boys



2. Classification/Types with examples?

A. *Central, gonadotrophin dependent*, *or true PP*:
e.g. brain tumors, or CNS malformation, 75% idiopathic

B. *Peripheral precocious puberty, Pseudopuberty*:
e.g. hormone producing ovarian tumors, exogenous estrogen administration, McCune Albright
Note: Central is the majority (80%!), & peripheral is always pathological

3. Investigations to do?

- FSH/LH (high in central, low in peripheral)
- Brain imaging
- Pelvic and abdominal imaging

4. How will you manage and why?

- Surgical resection if it's a lesion
- GnRH analogues to suppress pubertal development.
- Cause: to slow down the growth velocity and avoid early skeletal maturation. Furthermore, early development of sexual characteristic is distressing to a young girl.

5. If the patient has brown lesions on her skin and bone abnormalities, what syndrome you may consider?

McCune Albright Syndrome (Polyostotic fibrous dysplasia, Café au lait, & precocious puberty)

Q: 15 y/o brought by her mother who is concerned that her daughter has not menstruated yet, she is an athlete:

1. Define Primary Amenorrhea?

- Absence of menstruation, investigated at age 14 if there is no 2ry sexual characteristics or age of 16 with 2ry sexual characteristics

2. What physical findings you search for?

- Stature, BMI, Breast development, Hair (Pubic and axillary), Inguinal masses, hirsutism, virilization

3. What investigations you would order?

- Peripheral blood karyotyping: to differentiate syndromes
- Pelvic US/MRI: to R/O pelvic tumors
- FSH/LH: to differentiate between central and peripheral causes
- Estradiol level: related to breast development and ovarian function

4. What is your management for Turner?

- GH and HRT
- Induction of Puberty
- Childbearing is possible with ovum donation

5. What is the DDx if:

A: High FSH: Turner's, POF (so if no breast, and high FSH, *do karyotyping*!)

B: Low FSH: Central causes: hypogonadotropic hypogonadism or constitutional

C: Normal FSH: Mullerian agenesis, anatomical outflow obstruction, MRKH

D: Normal breast, and FSH 86 (High): Premature ovarian failure, CAIS

6. Four things you ask about in history:

- Chronic systemic illness such as D.M, cystic fibrosis, R.F
- History of delayed puberty in mother or sibling
- Anosmia(suggestive of Kallman's)
- Excessive exercise or competitive sports
- Anorexia nervosa
- Childhood cancer requiring chemotherapy or radiotherapy
- Cyclical pelvic pain.

7. if there's absent uterus in pelvic MRI, what are your DDx?

- CAIS
- Uterine agenesis *(Mayer-Rokitanskysyndrome)*

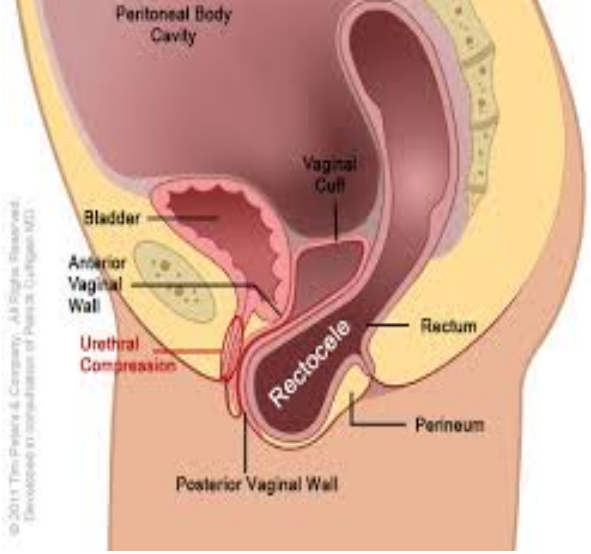
8. What is the investigation you do based on your DDx?

- Karyotyping

1ry Amenorrhea		
Cases	**Breast Development**	**FSH Level**
A. Central defect	**Absent**	**Low**
B. Gonad problem	**Absent**	**High**
Karyotype is required to differentiate:	Turner syndrome (45 XO)	
	Premature ovarian failure (POF – 46 XX)	
	Swyer Syndrome (46 XY)	
C. Puberty Arrest	**Normal**	**High**
Karyotype + imaging study	POF, Uterus Present	
	Complete Androgen Insensitivity (CAIS - 46 XY)	
D. Anatomical	**Normal**	**Normal**
Do Pelvic imaging to classify into:	Absent Uterus Rokitansky syndrome or MRKH,	
	Obstructive anomalies: might cause *hematometra*. Or pressure effect urinary *acute urine retention*	


UTI & Prolapse

Q: 55 years old patient presented to the clinic with the presentation shown in the picture:



1. What is your Dx?

- Posterior Vaginal Wall Prolapse (Rectocele)

2. Prolapse is best assessed when?

- Under general anesthesia

3. Name four risk factors (RF for all Prolapses)?

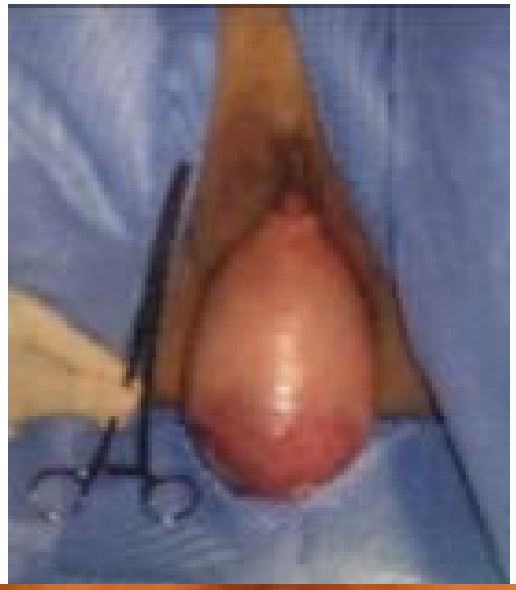
- Parity (strongest RF)
- Maximum birth weight
- Age, Menopause
- Constipation, straining
- Heavy lifting
- Obesity
- Previous pelvic surgeries

4. Name four symptoms?

- Incomplete bowel empty
- Obstructed defecation
- Constipation
- Fecal incontinence
- Inability to empty the rectum without reducing the prolapse.

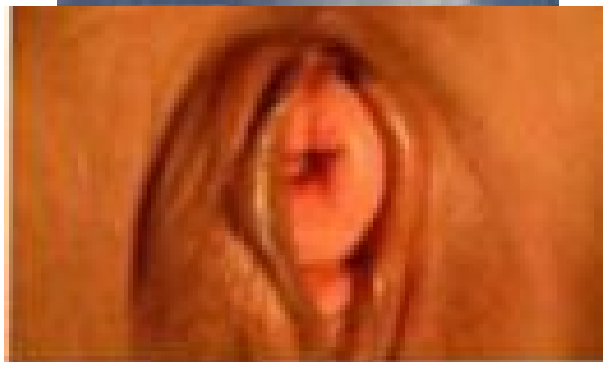
1. Mention the structures supporting the uterus?

1. Uterosacral Ligament
2. Round Ligament
3. Arcus Tendineus
4. Perineal body and membranes



2. The patient had a recent stroke and she is not fit for surgery, what are the non-surgical Mx that are possible for her (mention 2)?

1) Pelvic floor exercise (Kegel's Exercises),
2) Pessaries
3) Physiotherapy



3. When the patient becomes fit for surgery. what are the possible surgeries (mention 2)?

1) Vaginal hysterectomy with anterior and posterior repair
2) Trans-vaginal tape (TVT), Trans-obturator tape (TOT)

- Types of Surgical Approaches: Abdominal, Laparoscopic, Vaginal

Classification of prolapse surgery

Vaginal	Abdominal	Laparoscopic
Primary Vaginal hysterectomy Anterior/Posterior repair Secondary Sacrospinous fixation Iliococcygeus fixation Uterosacral fixation Recurrent+/- reinforcement Synthetic mesh/autologous/ donor/Xenograft	Primary Paravaginal repair Hysteropexy Secondary +- reinforcement Sacrocolpopexy Uterosacral/Sacrospinous fixation	All of the Abdominal procedures +/- reinforcement

POP-Q System

Aa "point A on the anterior wall" 3 cm above the hymen	**Ba** "point B on the anterior wall" 6 cm above the hymen	**C** "Cervix" normally: 7 cm above the hymen ring
gh "Genital hiatus" - normally: 3 – 4.5 - <3 narrow vagina - >4.5 wide vagina	**Pb** "Perineal Body" - normally: 2 – 3.5 - <2 deficient perineum	**Tvl** "Total vaginal length" - normally: 8 – 10 - <8 short - >10 long
Ap "point B on the posterior wall	**Bp** "point B on the posterior wall"	**D** "Posterior fornix"

For anterior wall prolapse: check Aa, Ba
For posterior wall prolapse: Check Ap, Bp
For uterine prolapse: C value

For anterior/posterior wall:
1st degree: ≤ (-1)
2nd degree: (-1) – (+1) – Note: Dr. Said only "0"
3rd degree: ≥ (+1)
For uterine prolapse: 1st degree (-6) – (-1),
2nd and 3rd degrees are the same

	-1	point A	0	point B	-5	cervix
genital hiatus	4		3	perineal body	9	total vaginal length
	+1	point A	+4	point B	-8	posterior fornix

1. What does number 4, 3, 9, -1 stand for?

4: Genital Hiatus

3: Perineal Body

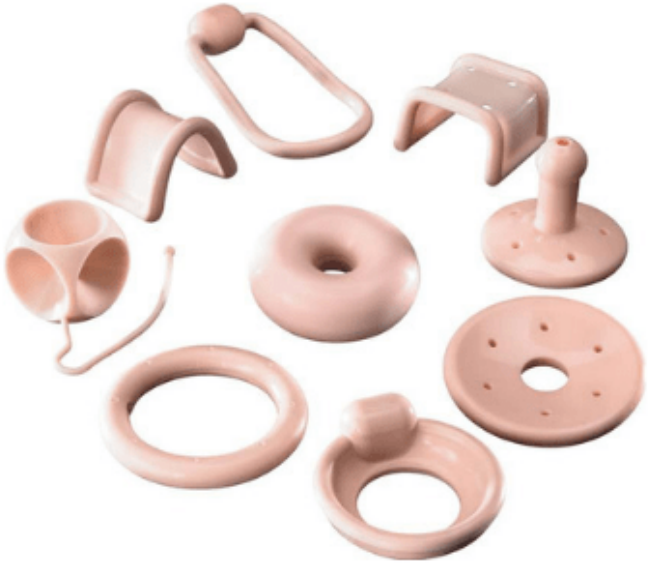
9: Total vaginal length

-1: Point A on the anterior vaginal wall

2. What is your Dx?

- Grade 2 Cystocele
- Grade 1 Uterine Prolapse
- Grade 3 Rectocele

Q: Apical uterine prolapse case with this picture:



1. What are these devices?

Vaginal Pessaries

2. Mention 2 complications for them?

1. Infection
2. Expulsion
3. Discomfort

/ fistula/ impaction/ bleeding

3. What are the Sx that the patient may complain other than the ones mentioned above?

1. Back pain
2. Impaired sexual activity
3. Heaviness
4. Dragging sensation

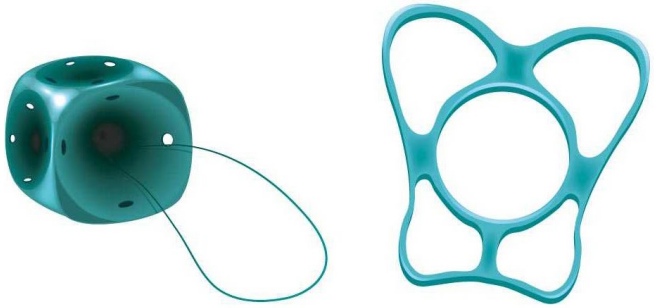
4. If this method failed, what is your Mx if she is sexually active/inactive?

If *sexually active*: Primary Paravaginal repair Hysteropexy.

If *sexually not active*: Primary Vaginal hysterectomy with Anterior/Posterior repair

Ring

For mild, first-degree uterine prolapse or for a cystocele.



Cube

For second or third-degree uterine prolapse. (To be removed each night).

Donut

For third-degree prolapse. (Not to be deflated during insertion or removal).

Dish

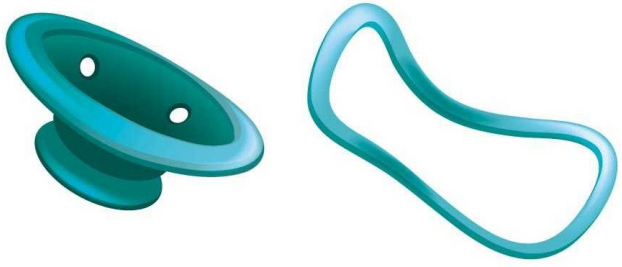
For stress urinary incontinence, with mild prolapse.

Shaatz

For mild prolapse complicated by a mild cystocele.

Gellhorn

For third-degree prolapse.



Ring With Knob

For stress urinary incontinence.

Q: Patient X is 65-year-old lady. She presented to the clinic c/o leaking urine when she coughs and sneezes. She cannot always make it to the toilet when she needs to void. In addition she mentioned that she voids 10 times during a day and must rise at least twice at night to void. Her symptoms started 2 months ago.

1. What is your clinical diagnosis?

- Mixed urinary incontinence (Urge + Stress)

2. What investigations will you request?

- Bladder diary
- Urine analysis
- Urine culture
- Urodynamic study
- Spermicides

3. What are the treatment options you would discuss with the lady?

- Fluid manipulation (Lifestyle Manipulations),
- Pelvic floor muscle training,
- Bladder training,
- Medications: Antimuscarinics,
- Surgery

Storage Sx	• *Urinary incontinence*: involuntary leakage • *Urgency*: the detrusor muscle suddenly contracts without leakage, if there was leakage , then its urgency incontinence • *Increased daytime frequency* • *Nocturia*: more times to void at night • *Nocturnal enuresis*: loss of urine occurring during sleep • *Urge urinary incontinence* (*UUI*): involuntary leakage preceded by urgency • *Stress urinary incontinence* (*SUI*): leakage with effort (sudden increase in the intra-abdominal pressure) • *Mixed urinary incontinence* (*MUI*): leakage + urgency + effort • *Continuous urinary incontinence*: continuous leakage (fistula) • *Sexual intercourse incontinence* • *Giggle incontinence*
Voiding Sx	• Slow-stream • Intermittent stream (intermittency) • Hesitancy • Straining to void: muscle effort to void

1. What is the name of the condition seen in the picture? Urgency

2. Define it. Sudden compelling desire to pass urine.

3. Explain the mechanism for this condition.
Detrusor over activity, over active bladder.

4. If the patient in the picture doesn't make it to the toilet and has incontinence when cough or sneeze, what does she has?
Mixed incontinence

5. Name a test to differentiate between the 2 types. Urodynamic study

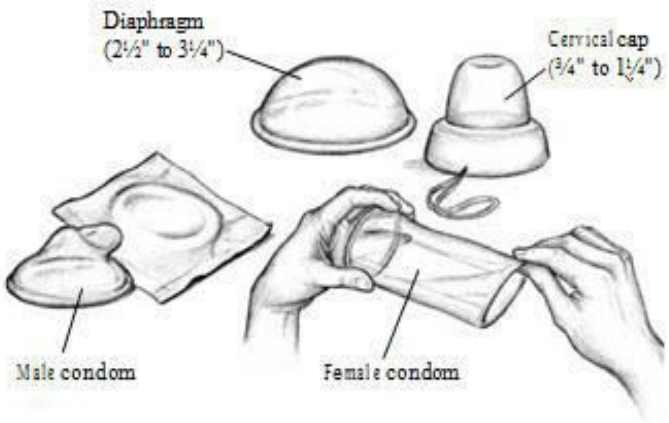

Contraception

1. What Is this contraceptive method?

- Barrier method of contraception

2. Give Examples of this type:

- Female condoms
- Male condoms
- Occlusive caps
- Vaginal sponges
- Spermicides
- diaphragm



Barrier Contraceptives

3. Advantages & Disadvantages?

Advantages	Disadvantages
- Widely available - Condoms protect from STI - No systemic SE - No effect on lactation - Decrease risk of cervical malignancy	- High FR - Not acceptable in some relationships - Diaphragms require fitting at clinics - Diaphragm size need to be change according to weight change ± 4 kg.

4. Explain the FR (Failure Rate)

explained by prefect use failure rate 4%
and typical use failure rate 20%

- FR of condoms depends on the way of use, correct insertion, use at right time, shouldn't be used with oil-based creams (use water-based creams)

Q: 23 y/o lactating asking about OCPs, she is 18 d postpartum

1. What are the types of OCPs:

- Combined estrogen + progesterone pills
- Progesterone only pills

2. What type you would prescribe for her? Why? And how would you teach her how to use it?

- We give her Progesterone only pills, because other types suppress lactation, she takes 28 tablets and starts a new pack immediately next month (1st 7 to inhibit ovulation which are the most important ones & the remaining to maintain anovulation, there is no PFI) also warn her of major SE, and recommend her to wear a condom for STI protection.

3. Mention non-contraceptive benefits of OCPs?

- Decrease Menstrual disorders
- Decrease Benign ovarian tumors, and functional ovarian cysts
- Decrease Benign breast disease
- Decrease PID
- Decrease endometrial and ovarian and colon cancer
- Protective against RA, thyroid disease and duodenal ulcer

4. What is the most feared SE by new pills users?

- VTE

Q: 69-year-old lady takes HRT pills:

1. Name 3 advantages and 3 SE?

Advantages	Side Effects
- Improve Vasomotor Sx - Reduce risk of osteoporosis - Reduce risk of urogenital Sx and improve sexuality - Reduce risk of colorectal cancer	- More risk of breast and endometrial cancer - More risk of VTE - More risk of gallbladder disease

2. Describe the relation between HRT and endometrial Carcinoma?

- while estrogen only pills do increase the risk of endometrial cancer the estrogen and progesterone pills don't, because of the protective effect of the progesterone

3. If Hysterectomy was done in this patient, what is the drug of choice for her?

- Estrogen only

Q: A women less than 40, nonsmoker, no chronic medical illnesses, she complains of HMB (heavy menstrual bleeding), and she ask you for a contraceptive method with long duration (>5y)

1. Mention 3 long duration methods for this patient?

- Hormonal: Mirena, Progesterone injections, implants
- Non-hormonal: Cupper IUD

2. What is your 1st choice and why?

- Mirena, because it works on both HMB and Contraception, and easily reversible with very low failure rate

3. Mention four risk factors for this choice?

- Expulsion, Perforation, PID, Vasovagal syncope, Ectopic pregnancy, Pregnancy (if failed), Lost thread

1. Name the two methods?

A. IUCD (Intra-uterine cupper device)

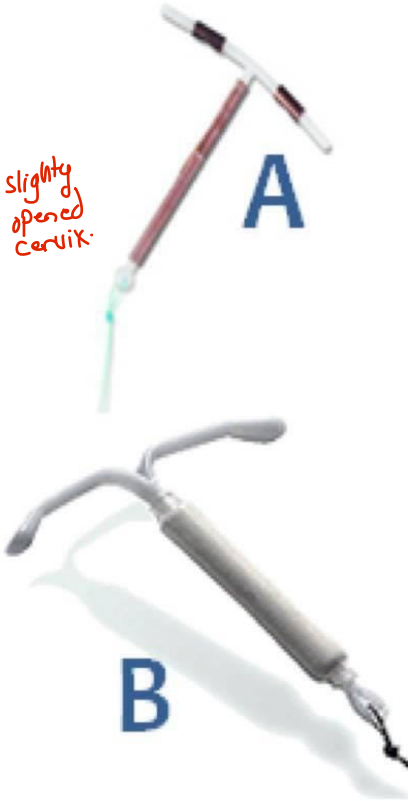
B. IUS Mirena (Intra-uterine system)

2. When to insert it for:

a. Menstruating lady, & Why: immediately after the end of menses (day 5-6), because there is no uterine contraction, to R/O pregnancy & for easier insertion (cervix is still open)

+ slightly opened cervix.

b. After C/S: after 4-6 weeks



3. When to tell the lady to come back for follow up?

4-6 weeks after insertion

why? U/S — to look if in site in correct place, not descent, no expulsion

speculum → to check threads

4. How would you follow up (2 points)?

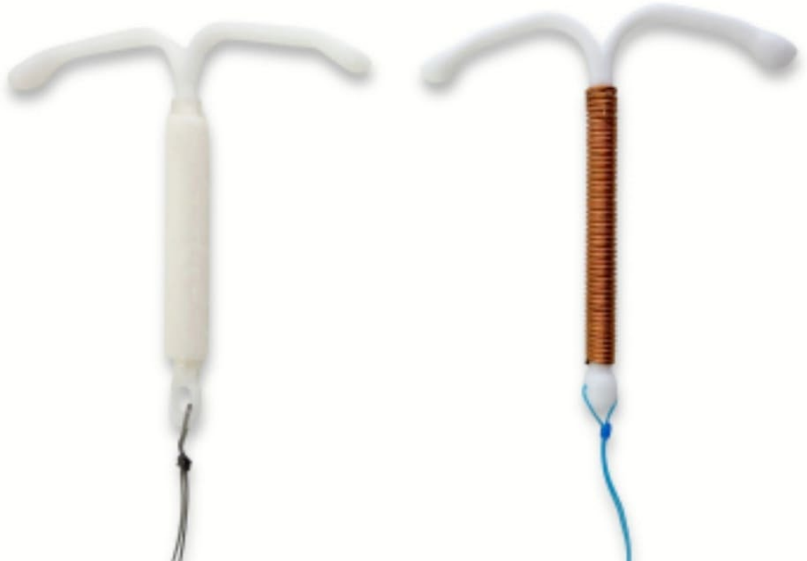
- Check if the lady has any problems since its insertion "pregnancy, perforation, expulsion, missed thread", if it was expulsed after menses then check the thread by speculum , if not seen then do US … if not seen also: do abdominal x-ray for copper , CT for Mirena.

5. Mention 1 contraindication?

- Breast Ca
- Undiagnosed vaginal bleeding
- Pelvic TB

6. How long do they action for?

- IUCD (10 years)
- IUS (5 years)



7. Mention 2 complications at time of insertion of device or one week after?

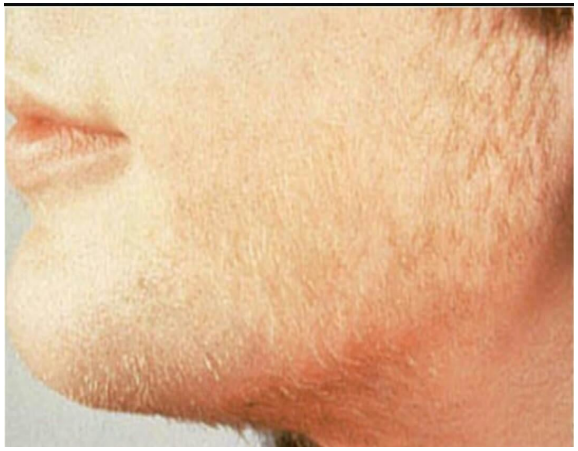
- Perforation
- Vasovagal Syncope
- Thread loss
- Ectopic Pregnancy
- PID

8. Non-Contraceptive benefits (medical ones)?

- Reduces vaginal bleeding, pain
- Endometrial protection
- Mx of endometriosis


Infertility

Q: Huda, a 28 y/o obese lady , she complained of irregular menstrual bleeding



1. What is shown in the picture?

- Hirsutism

2. Diagnosis Criteria of PCOS:

requires 2 of the following + exclude other causes

- Oligo/Anovulation
- Hyperandrogenemia/Hyperandrogenism
- PCO on US >12 follicle in each ovary or increased ovarian volume >10ml

3. 3 Investigations for infertility?

- Testosterone concentration
- FSH & Estradiol
- TSH

4. Write the WHO Criteria for ovulation disorders with examples?

- Group I: hypothalamic pituitary failure: Stress (by diet and exercise)
- Group II: hypothalamic-pituitary-ovarian dysfunction: PCOS
- Group III: ovarian failure.

Group I ovulation disorders (hypogonadotropic, hypo-estrogenic anovulation) are caused by the hypothalamic pituitary failure. This category includes conditions such as **hypothalamic amenorrhea and hypogonadotropic hypogonadism.**
Group II ovulation disorders (normo-gonadotropic, normo-estrogenic anovulation) are defined as dysfunctions of the hypothalamic-pituitary-ovarian axis. This category includes conditions such as **polycystic ovary syndrome and hyperprolactinemic amenorrhea**.
Group III ovulation disorders (hyper-gonadotropic, hypoestrogenic anovulation) are caused by **ovarian failure.**

5. PCOS Treatment/Advices for fertility (Induce Ovulation)?

-Treat obesity
-Ovulation induction: by this chronological order:

1) Wt. reduction and lifestyle changes to reach optimal BMI (19-30)
2) Metformin: 8% rate of success.
3) Clomiphene: 6 consecutive cycles with 75% ovulation rate.
4) Letrozole aromatase inhibitor.
5) Either FSH&LH injections or LOD with preference of the latter.
6) IVF as a last resort

6. Mention2 causes of Hirsutism?

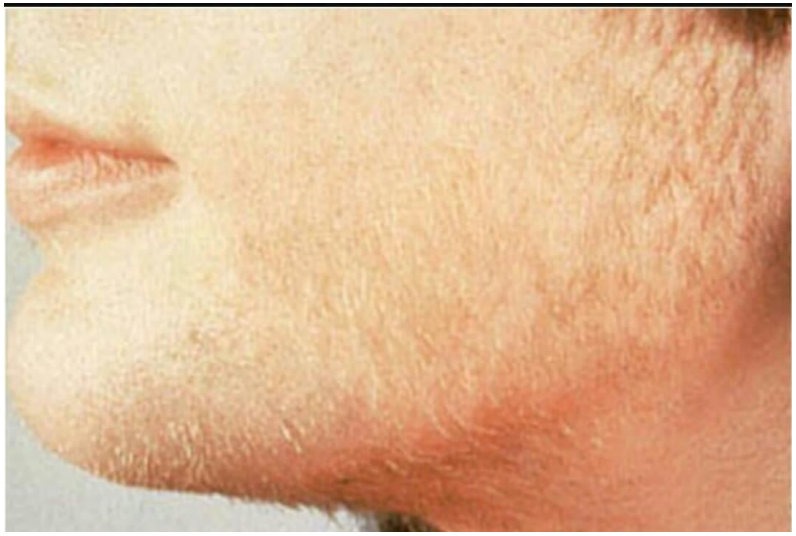
1) PCOS
2) Ovarian tumors (sertoli leydig tumor)

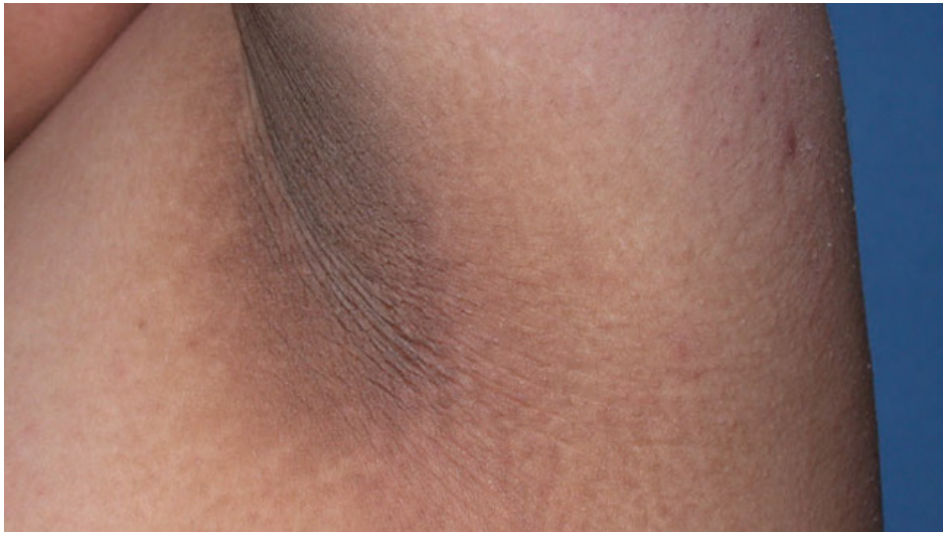
7. if medical Mx failed, mention 2 other options?

- Laparoscopic ovarian drilling (LOD)
- IVF

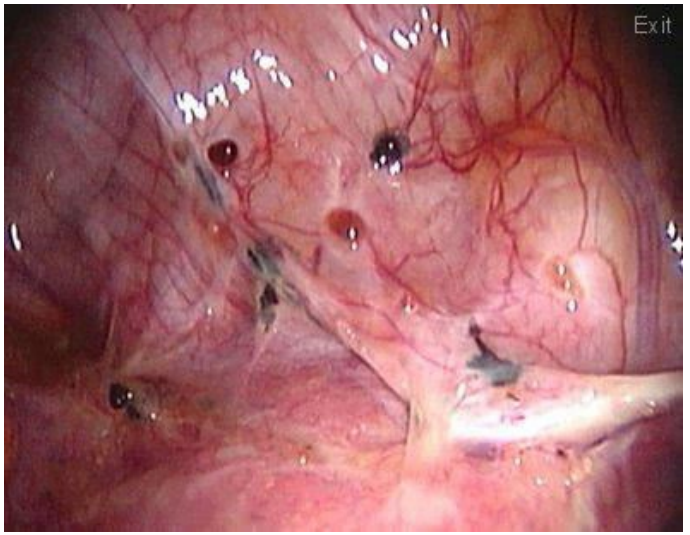
8. On physical examination give 2 signs you will look for?

1) Acne and signs of verilization
2) Acanthosis nigricans





Q: 24 y/o married female, G0, presents to your clinic with chronic pain for 3 years, according to the image below, answer the following questions:



1. What is your Dx?

- Endometriosis

2. Give other causes of pelvic pain?

- PID
- Adenomyosis
- Pelvic adhesions

3.Mention different approaches to Mx this patient?

1) Conservative: simple analgesia, patient support groups

2) Medical: COCP, Progestogen, GnRH agonist, aim is to produce atrophy of ectopic endometrium

3) Surgical

4. Name the types of surgeries you may do for her?

1) Laparoscopic ablation (Laser or bipolar) and excision

2) TAH + BSO

1. Name of this procedure?

- Hysterosalpingogram

2. What is the indication for use?

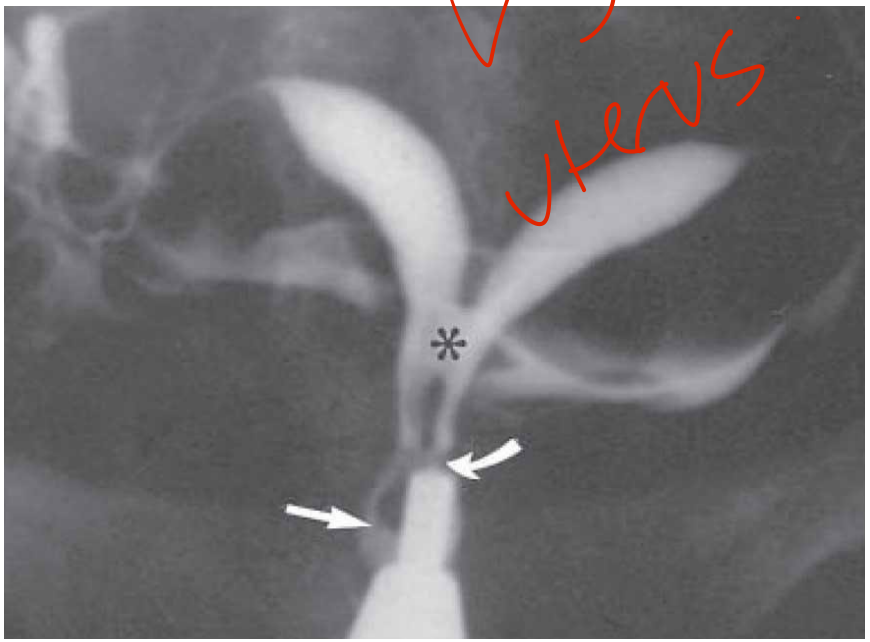
- Tubal patency test, and the shape of uterine cavity

3.Mention the abnormality?

- Bicornuate uterus

or uterine septum

V shape uterus



4.What advice you give the couple in order to conceive?

- Stop smoking
- Semen analysis workup
- IVF

5. mention the normal levels of the three primary parameters for sperm analysis (semen analysis)?

- Concentration: >15 million
- Motility: >40%
- Morphology: >4%

6. According to group 2 WHO disorders, what are the non-surgical Mx for ovulation induction? Group 2 is PCOS

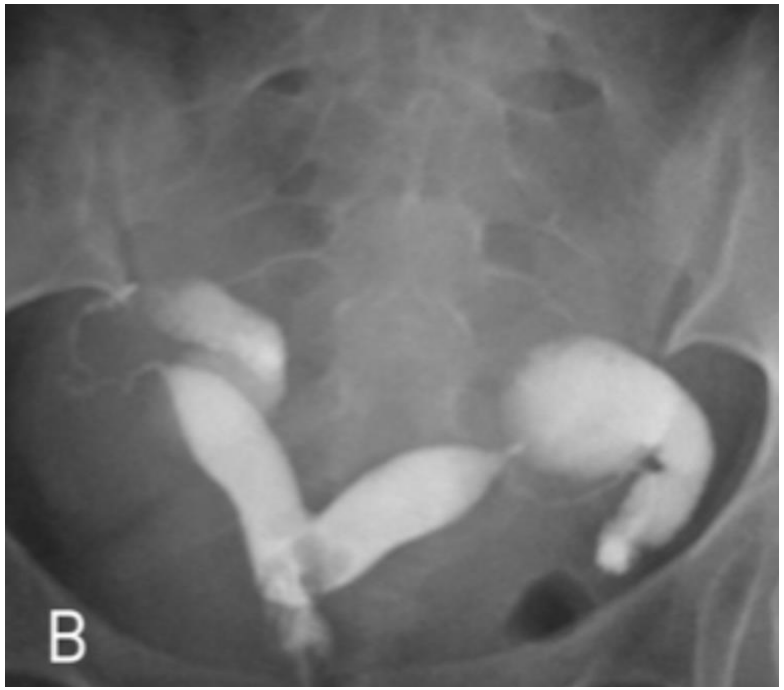
- Reduce weight
- GnRH administration
- Clomiphene Citrate/Metformin

1. Mention two abnormalities?

- Bicornuate uterus
- Distal obstruction of both tubes with dilatation (Hydrosalpinxes, some said only the left tube)

2. Mention two other investigations to use?

- Laparoscopy
- Hysteroscopy
- Hysterosalpingo-contrast sonography (Hy-Co-Sy)



3. if pregnancy occurred naturally, mention two complications that might occur?

- Miscarriage (50%)
- Pre-term delivery
- IUGR
- Malpresentation

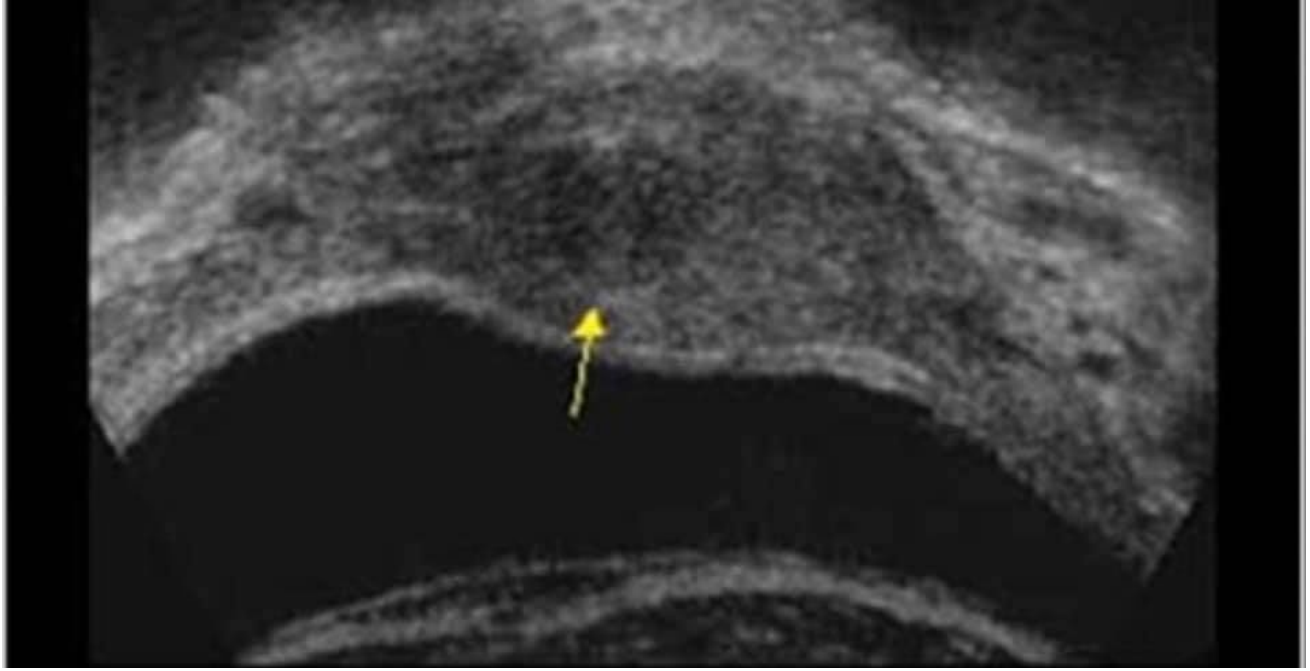
4. How you would know that the patient has ovulated (two points)?

1) Serum progesterone in mid luteal phase of the cycle
2) Serum FSH-LH on day 2-3

regular menstrual cycles.

5. How you can treat this patient (two points)?

- Laparoscopic Salpingectomy or disconnection of both tubes
- then IVF or ICSI



Q: Lady came to your clinic complaining of dysmenorrhea, 35 years old, G3 p3.

1. What is in the picture?

Fibroids

2. How does cause infertility? (4 points)

1) Affect tubal motility,

2) Anatomical blockage,

3) Affect implantation (sick endometrium),

4) mechanical obstruction of tubs

① interfere with implantation (sub mucosal)

② obstruction of fallopian tube (intra mural)

③ anatomical distortion

④ alter blood supply of endometrium

3. Mention 3 lines of management.

1) Conservative (Expectant),

2) Medical: Hormonal (Mirena, GnRH), Non-Hormonal (NSAIDS)

3) Surgical (Myomectomy, Hystrectomy)

④ TCRF

4. What is the benefit of medical therapy before surgery?

Shrink in size, less bleeding, alleviate symptoms, can change incision from midline

5. In fertility point of view, what are the indications for surgery?

>4cm, recurrent abortions, multiple fibroids

6. How does fibroids cause AUB?

Endometrial stretching (increase cavity size – more surface area)

Increase vascularity

Interfere with uterine contractility

Endometrial hyperplasia (Hyper-estrogenic state)

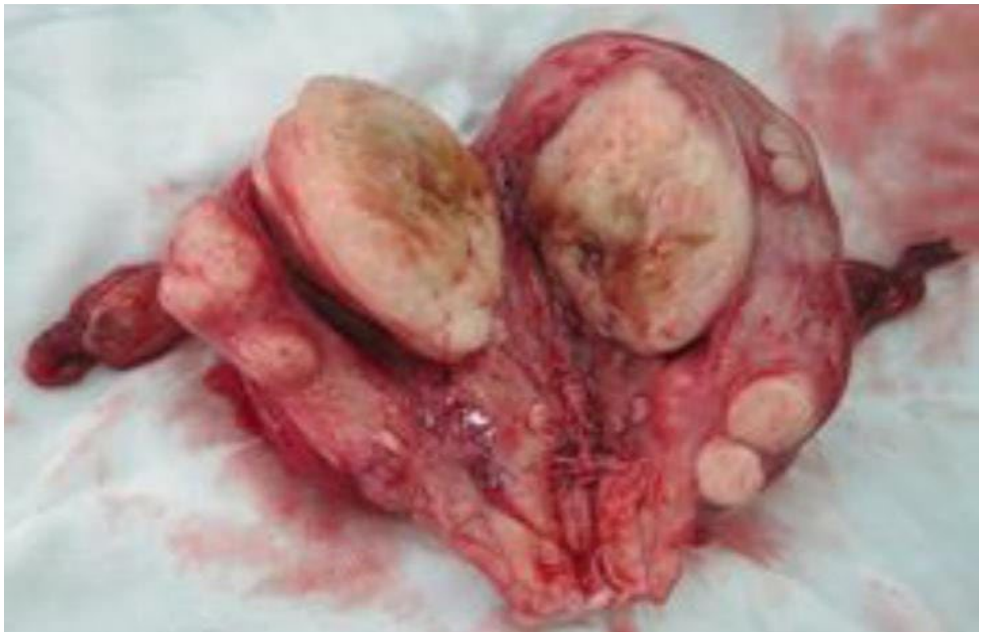
Q: 47 y/o lady complains of painful vaginal bleeding, and hysterectomy was done before one week, for that reason:

1. What is your Dx?

- Multiple Uterine Fibroid

2. Mention other option than hysterectomy for Mx?

1) Mirena IUS
2) GnRH Analogues
3) Myomectomy
4) Observe till menopause, the fibroids will shrink alone



3. Mention Fibroids RF?

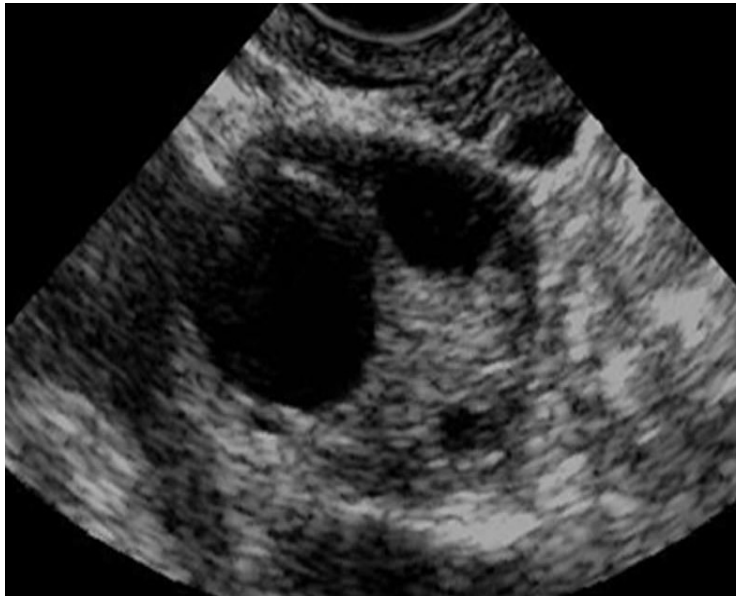
1) Nulliparus
2) Estrogen producing tumors
3) Obesity

hyper-estrogen state
early menarche / late menopause

protective factor
1- multi parity
2- Smoking


Oncology &
Masses

Q: 50 y/o Pt complains of Rt lower abd pain, you did US



1. Suppose this is a malignant tumor what signs you would see on US?

Benign	Malignant
• Unilateral • Unilocular • Thin wall • No papillae • No solid areas	• Bilateral • Multilocular • Thick wall • present Papillae • Mixed echogenicity (due to solid areas) • Greater vascularity (angiogenesis and blood flow)

+ 1 solid components
2- multi loculations
irregular + thick wall

2. Most common ovarian malignancy?

- Dysgerminoma

3. Possible complications of ovarian cysts?

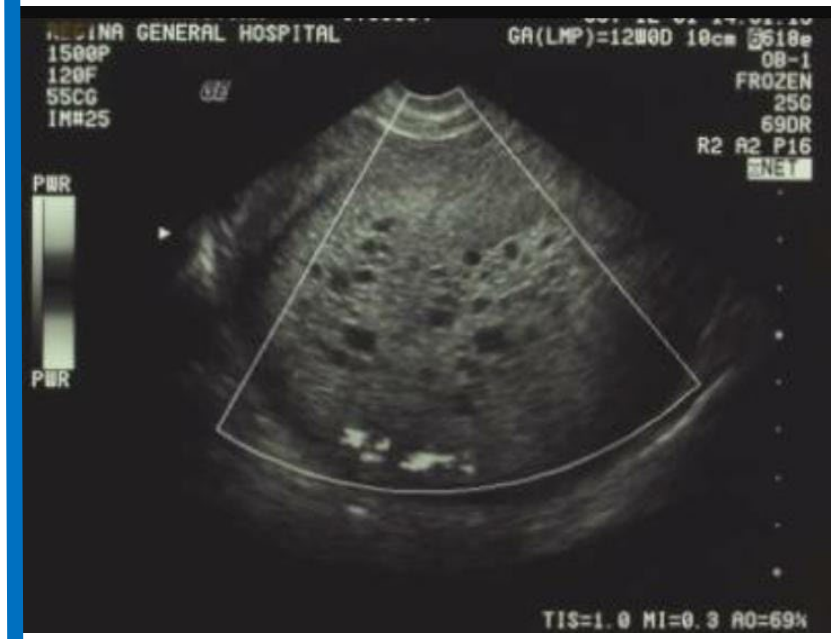
- Rupture
- Torsion
- Hemorrhage
- Infection

4. Mention 4 types of germ cell tumors of the ovaries:

- Dysgerminoma
- Endodermal Sinus T
- Choriocarcinoma
- Gonadoblastoma
- Teratomas

② yolk sac tumor
③ embryonal tumor
④ choriocarcinoma
⑤ teratoma

Q: 26 y/o complains of vaginal bleeding one week after vaginal delivery:



1. What is your Dx?

- Partial Hydatiform Molar pregnancy

2. Mention 4 points to ask in the Hx?

1) Recurrent vomiting
2) Hyperthyroidism Sx
3) Vaginal Passage of Vesicle
4) Pelvic pain

3. What investigation you should do to confirm your Dx?

- B-HCG
- Histological examination of the tissue

4. Mention 4 findings in PE?

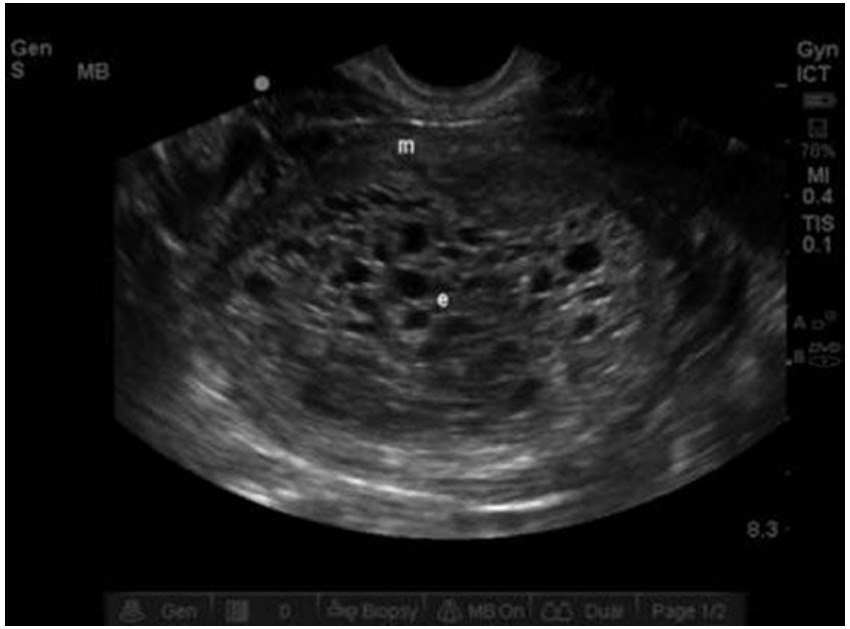
1) Gravid uterus / over distended fundus
2) Signs of hyperthyroidism
3) Signs of anemia
4) Blood pressure high.

5. What is your Mx?

- Surgical Evacuation by Suction and Curettage + follow up of B-HCG Lvls.

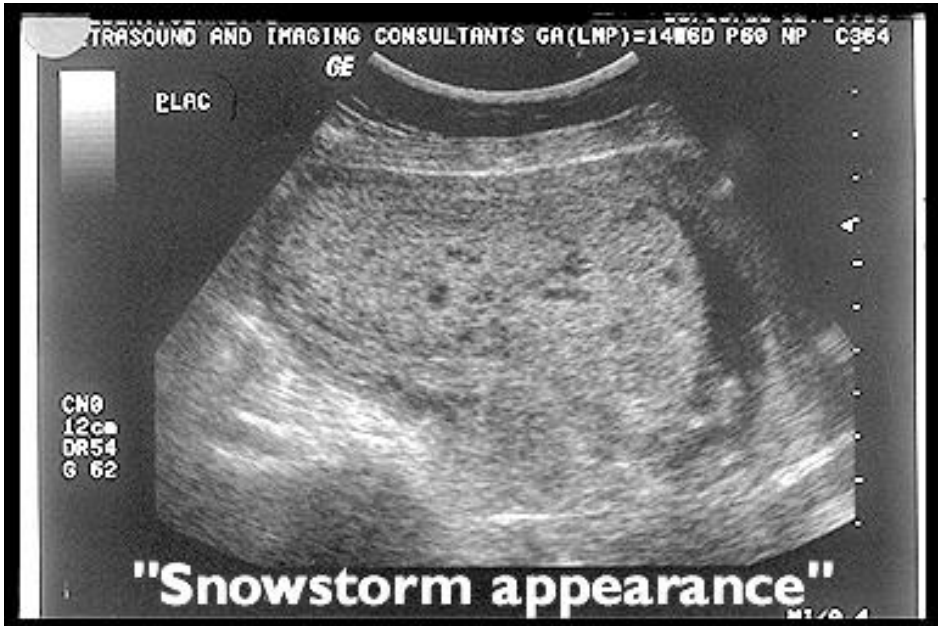
Swiss Cheese or Honey Comb Appearance

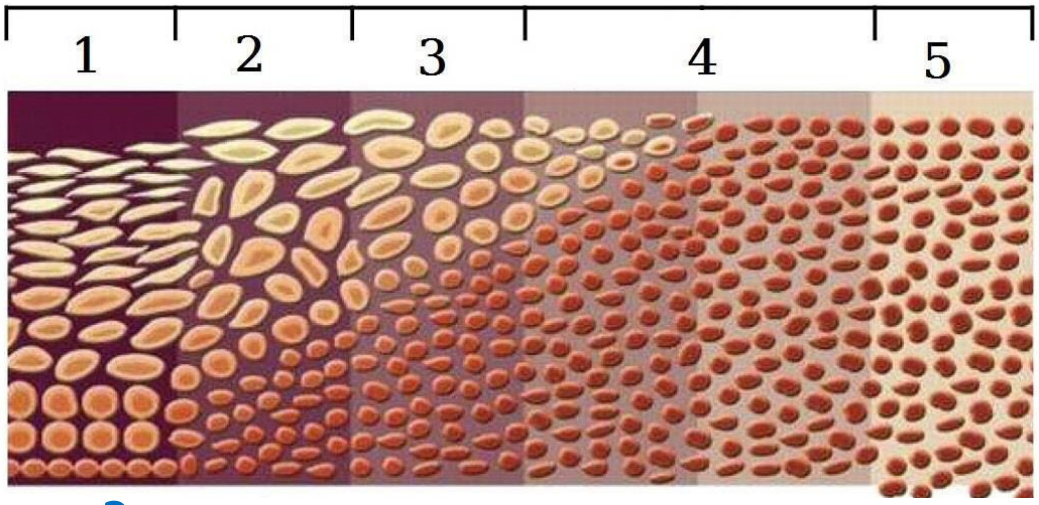
Partial Hydatiform Mole



Snowstorm Appearance

Complete Hydatiform Mole





1. Name of the test?

- Pap Smear

2. Indication?

- Screening tool for pre-malignant cervical changes

3. What are the numbers 1 – 5?

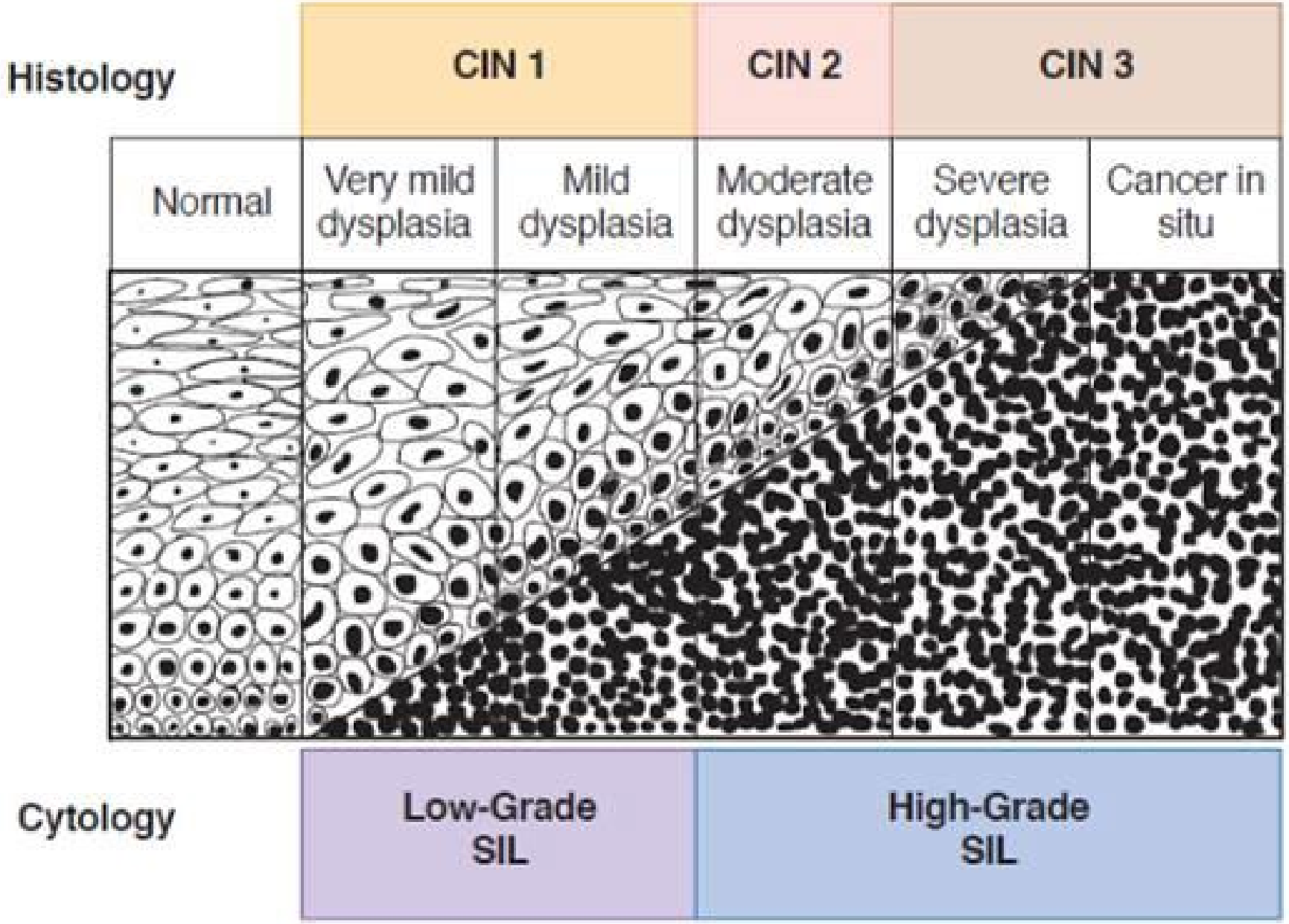
1: Normal
2: Mild Dysplasia or CIN (1)
3: Moderate Dysplasia or CIN (2)
4: Severe Dysplasia of CIN (3)
5: Invasive Carcinoma

4. At what age do we start doing it, and at what age do we stop?

- **Start:** start at 21 years, or after ~~the~~ 3-years of first sexual contact
- **Stop:** stop at 65 years if all tests were (-) for the last 10 years

Based on the British Guidelines:

- Start: at 25 years and do it every 3 years, till 49 then do it every 5 years, till 65 (if the last 3 times were negative)


Histology
CIN 1
CIN 2
CIN 3
Normal
Very mild dysplasia
Mild dysplasia
Moderate dysplasia
Severe dysplasia
Cancer in situ
Cytology
Low-Grade SIL
High-Grade SIL

Obstetrics

Obstetrics Topics

Topic	Slide Number
Metabolic Diseases (HTN, DM)	47
Labor & Presentation	54
PTL, PROM, Post-Date	77
APH, PPH	89
Twins	96
Other Obstetric Complications	100
CTG & Partogram	108
Instrument	120
Other	123

Metabolic Diseases (HTN, DM)

Q: Pregnant 28 weeks, having BP 140/90:

1. Mention 3 RF of PET?

- FHx
- 1st pregnancy
- Extremes of maternal age
- Obesity
- Medical (DM, renal disease, pre-existing HTN)
- Obstetric factors (multiple pregnancy, PET Hx, triploidy)

2. What is your Mx?

This is mild hypertension. Mild hypertension doesn't require medical therapy and only lifestyle modifications + regular follow ups. Medical management starts at severe hypertension (systolic 160 or higher, diastolic 110 or higher). If you want to give medical management, it would be as follows:

- Methyldopa, slow release nifidipine, labetalol
- AVOID: Diuretics, atenolol, ACEI, ARBS

3. Give 3 investigations?

- Renal function test
- Liver function test
- CBC, Albumin-creatinine ratio

Q: A pregnant lady, 32w GA, presented with abdominal pain, headache, no known medical illnesses, then developed a self limited seizure:

1-what is the likely Dx? (mention 2)

-Eclampsia

2-what is the most important sign on examination?

Blood pressure

3-mention 3 lines of treatment with their indications

- Hydralazine to lower blood pressure
- $MgSO_4$ for seizure prophylaxis
- Corticosteroid for fetal lung maturity

Q: PET case with headache, her BP was 170/90, LMP 5/12/2019:

1. Calculate EDD?

12/9/2020

2. What is your Dx?

PET

3. Mention 2 Sx?

Vomiting, Photophobia, RUQ Pain

4. Mention 2 Signs?

Edema, Hypertension, RUQ Tenderness

5. What are the Clinical Parameters of your Dx?

Blood pressure, urine analysis, presence of frothy urine

Q: Gestational Hypertension

1. Severe PET Dx:

- Systolic BP >160 or diastolic >110 on 2 occasions of 6 hrs apart
- Proteinuria ≥ 5 g/24 hrs
- Oliguria < 500 cc /24 hrs
- Cerebral or visual symptoms
- Epigastric or Rt upper quadrant pain
- Pulmonary edema or cyanosis
- Low PLt
- ↑↑ liver enzymes
- IUGR

2. Anti-hypertensive medications?

- Avoid: Diretics, Atenolol, ACEIs, ARABs
- Methyldopa (slow releasing Nifedipine or Labetalol may be added)
- If BP >170/110: Check blood pressure every 15 minutes until stable + Labetalol 50 mg I.V. repeated at 10 minutes PRN **or** Hydralazine 10 mg I.M. or I.V. **or** Nifedipine 10 mg orally repeated at 30 minutes PRN

3. Management?

- Lifestyle
- Fetal Assessment
- Fluid management
- Medications

Q: Pregnant lady came with high blood sugar reading:

1. What are the complications on: mother, fetus, neonate:

Mother	Fetus	Neonate
- Risk of miscarriage - Risk of PET - Risk of infection - Risk of LSCS rate	- Congenital Anomalies - Macrosomia - Stillbirth - IUFD/IUGR - Polycythemia	- RDS - Hypoglycemia - 2ry Polycythemia - Jaundice - Hyper-viscosity syndrome

2. What are the effect of pregnancy on Diabetes:

1) Increase requirement of insulin
2) More risk of nephropathy, or worse deterioration
3) Progression of diabetic retinopathy
4) Hypoglycemia
5) DKA

Anti hypertensive treatment

Mild PET

- There is no benefit of antihypertensive therapy

Severe PET

Antihypertensive therapy is used to prevent maternal stroke i.e acute HTN complications

Anti hypertensive treatment

- **Methyldopa** 500 mg P.O. loading followed by 250-750 mg q.d.s
- Slow-release **nifidipine** or **labetalol** may be added to this regimen
- Antihypertensive medications that should be avoided;
  - *Diuretics*
  - *Atenolol*
  - *Angiotensin converting enzyme inhibitors (ACE)*
  - *Angiotensin receptor-blocking drugs (ARB)*

Anti hypertensive treatment

- If BP > 170/110 mmHg;

PRN
- **Labetalol** 50 mg I.V. repeated at 10 minutes

OR

- **Hydralazine** 10 mg I.M. or I.V.

OR

PRN
- **Nifedipine** 10 mg orally, repeated at 30 minutes

❑ Check blood pressure every 15 minutes until stable

PREVENTION /CONTROL OF CONVULSIONS

- Magnesium sulfate IV infusion ➡ 4 gm loading dose in 100 ml of IV fluid over 20 min ➡ 2 gm /hr maintenance
- Measure serum MG level at 4-6hrs maintain at 4-7 mEq /L
- D/C 24 hrs after delivery➡25% of seiz occur post partum
- Avoid toxicity by :
  - -monitoring patellar reflexes
  - -respiratory rate
  - -urine output
- Antidote ➡calcium gluconate 1gm IV
- Compared to phenytoin or diazepam ➡50% ↓ in maternal mortality ,67% ↓ in convulsions


Labor &
Presentation

Definitions

- **Engagement:** the widest diameter of the presenting part is below the pelvic brim.

- **Descent:** passage of the presenting part of the fetus through the birth canal, this occurs as a result of the active forces of labor.

- **Position:** the relationship of the denominator (occiput/sacrum) of the presenting part to the quadrants of pelvis.

- **Station**: the relationship in cm of the presenting part (head/buttocks/feet) to the ischial spines.

- **Lie**: relationship of the long axis of fetus to the long axis of the uterus e.g. longitudinal, transverse, oblique.

- **Presentation**: the presenting part of the fetus which is occupying the lower pole of the uterus i.e. cephalic (vertex), breech, face, brow or shoulder.

Q: What are the cardinal movements?

1. Engagement
2. Descent
3. Flexion
4. Internal rotation
5. Extension
6. External rotation
7. Expulsion

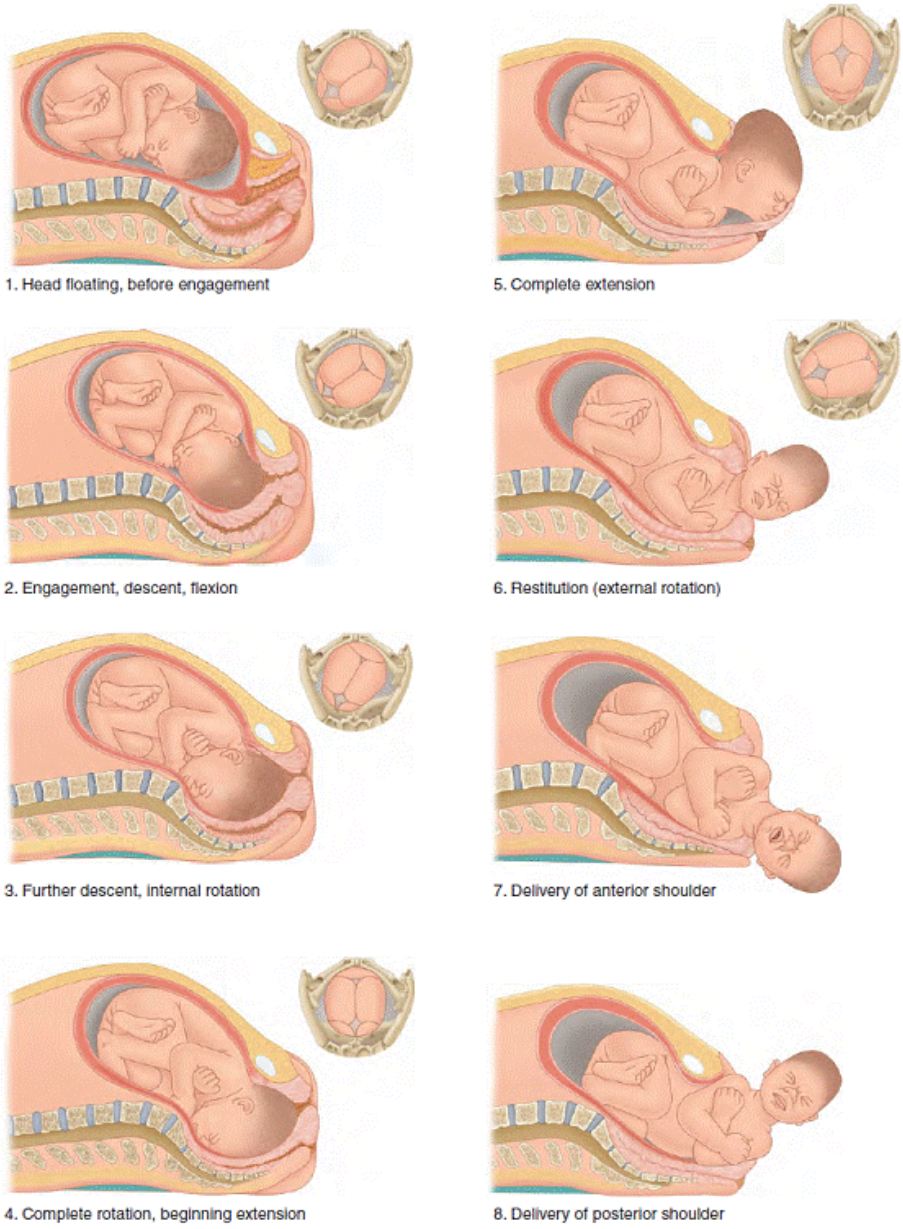
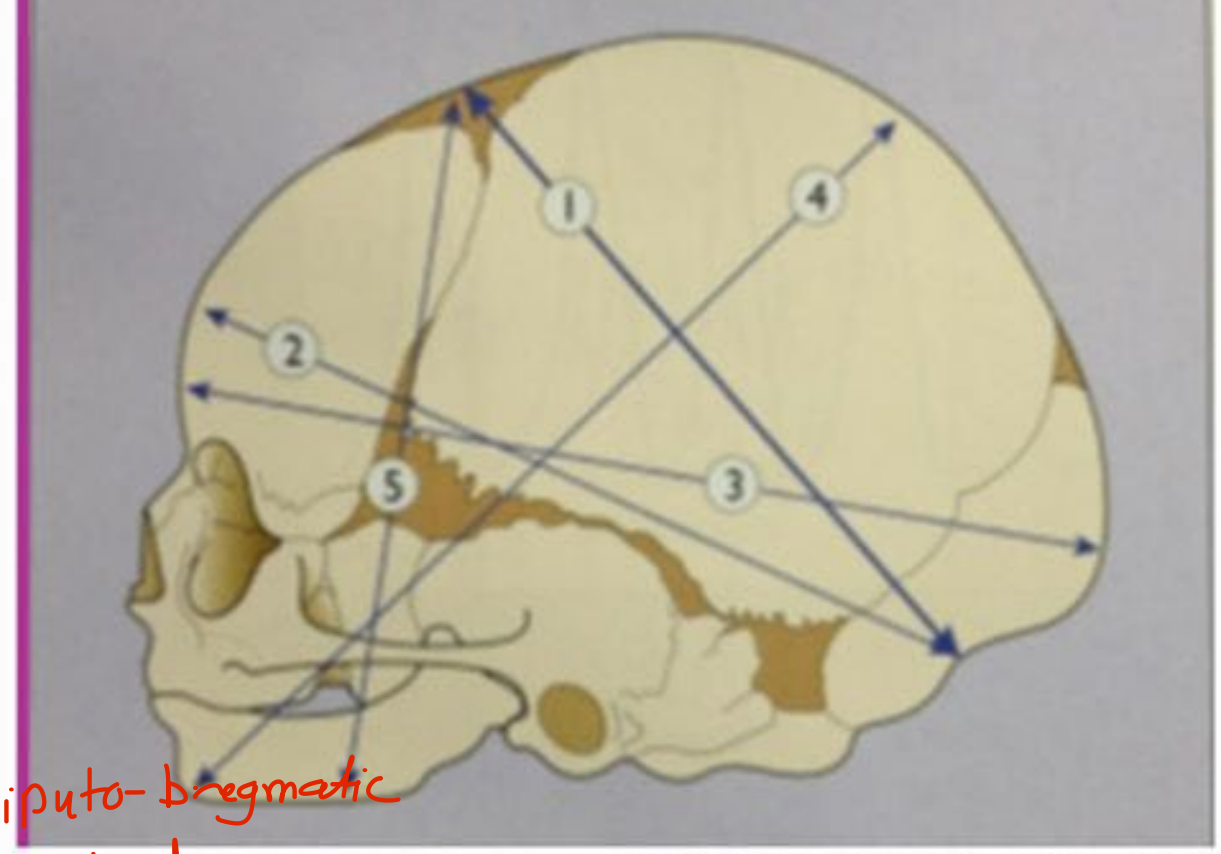
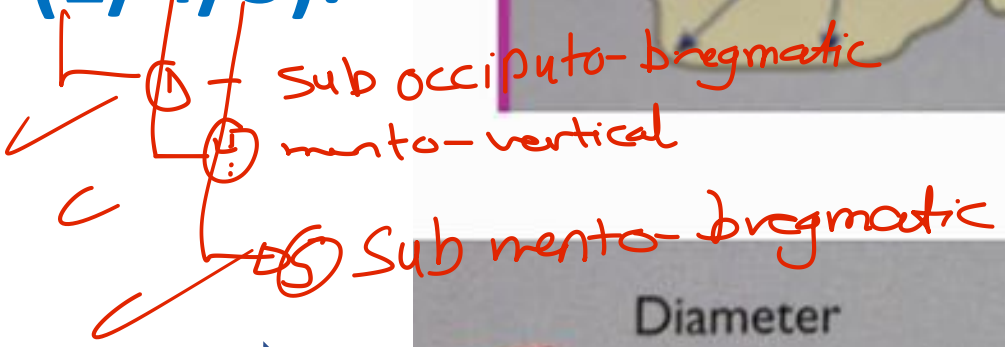


FIGURE 17-11 Cardinal movements of labor and delivery from a left occiput anterior position.

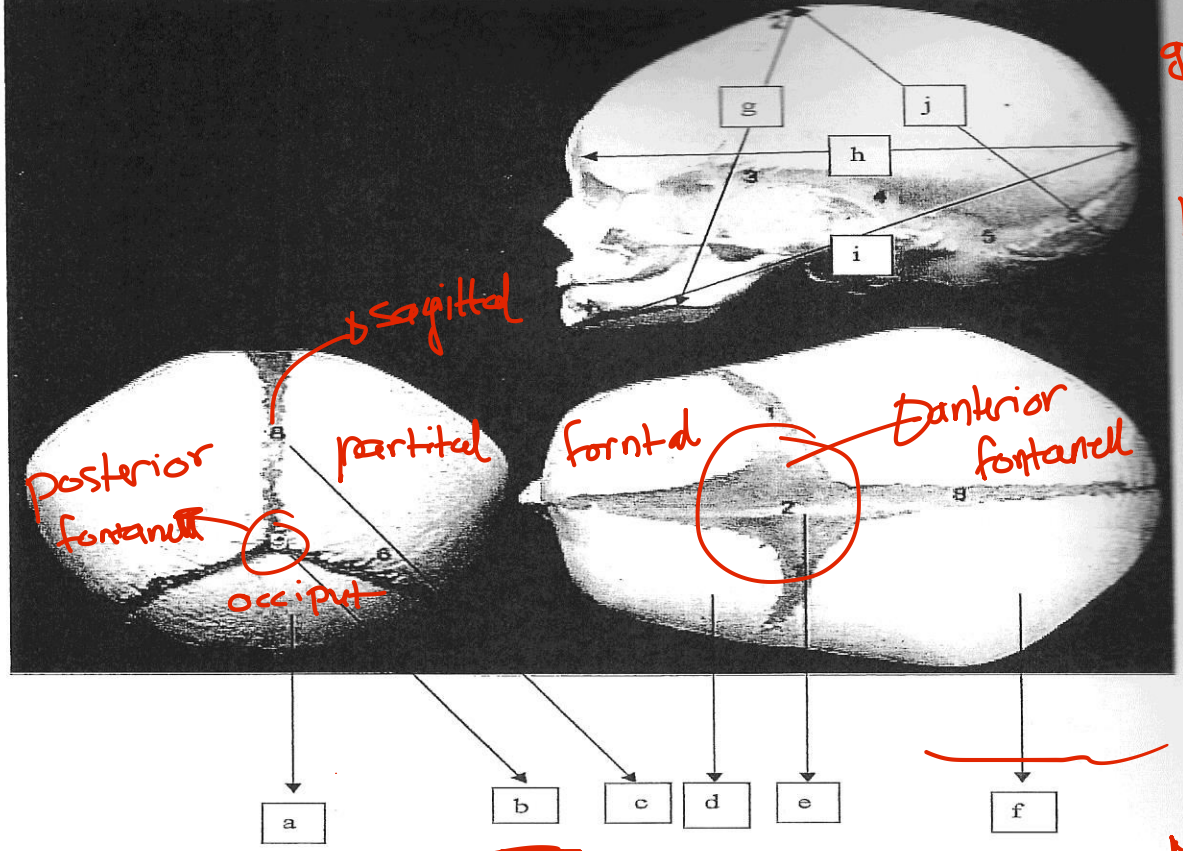
Q: What is the names and lengths of these diameters (1/4/5):



Ask about diameter and lenghth of 1,5, 4



Diameter	Length	Presentation
1 Suboccipito-bregmatic	9.5cm	Flexed vertex
2 Suboccipito-frontal	10.5cm	Partially deflexed vertex
3 Occipito-frontal	11.5cm	Deflexed vertex
4 Mento-vertical	13.0cm	Brow
5 Submento-bregmatic	9.5cm	Face



g) Submento-bregmatic (face)

h) occiput frontal (deflexed vertex)

j) Sub occiput bregmatic (vertex)

i) mento-vertical (brow)

Parts of fetal skull:

a) Occipital bone

b) Posterior fontanella

c) Saggital suture

d) Frontal bone

e) Anterior fontanelle

f) Parietal bone

Presenting diameters:

Name of the diameter

presenting part

g) Face presentation:

Submento-bregmatic

h) Deflexed OP:

Occipito-frontal

i) Brow presentation:

Occipito-mental

j) Normal vertex:

Sub-occipito bregmatic

Q1: Define Station:

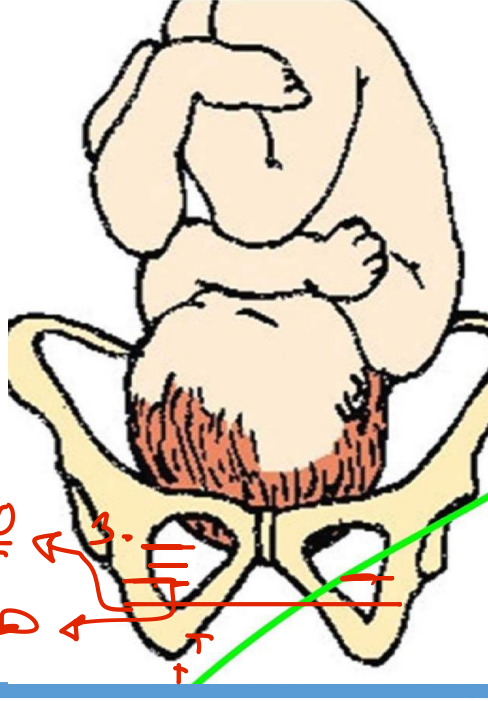
- Position of presenting part in cm in relation to ischial spine

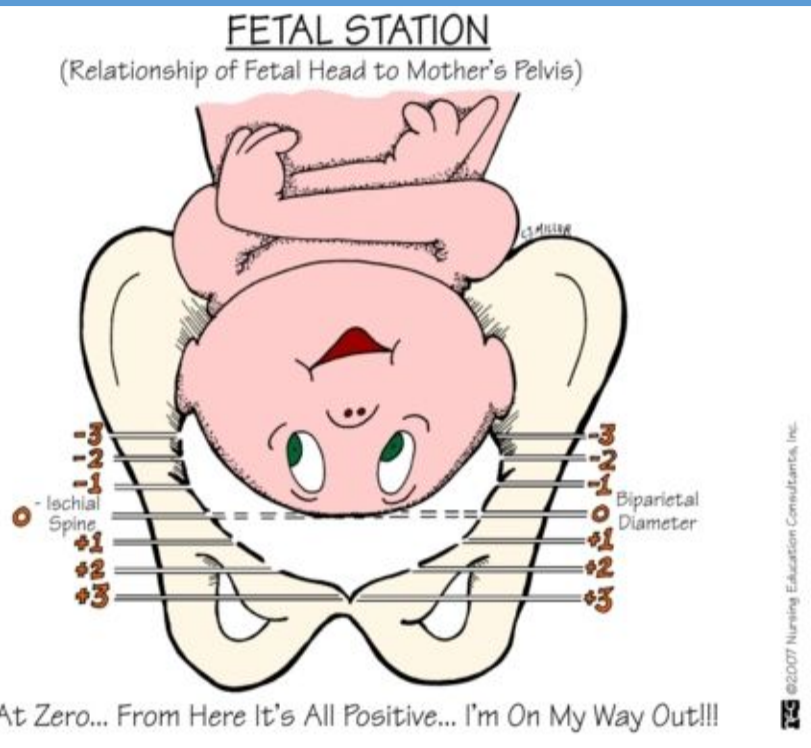
Q1: What's the station in the picture?

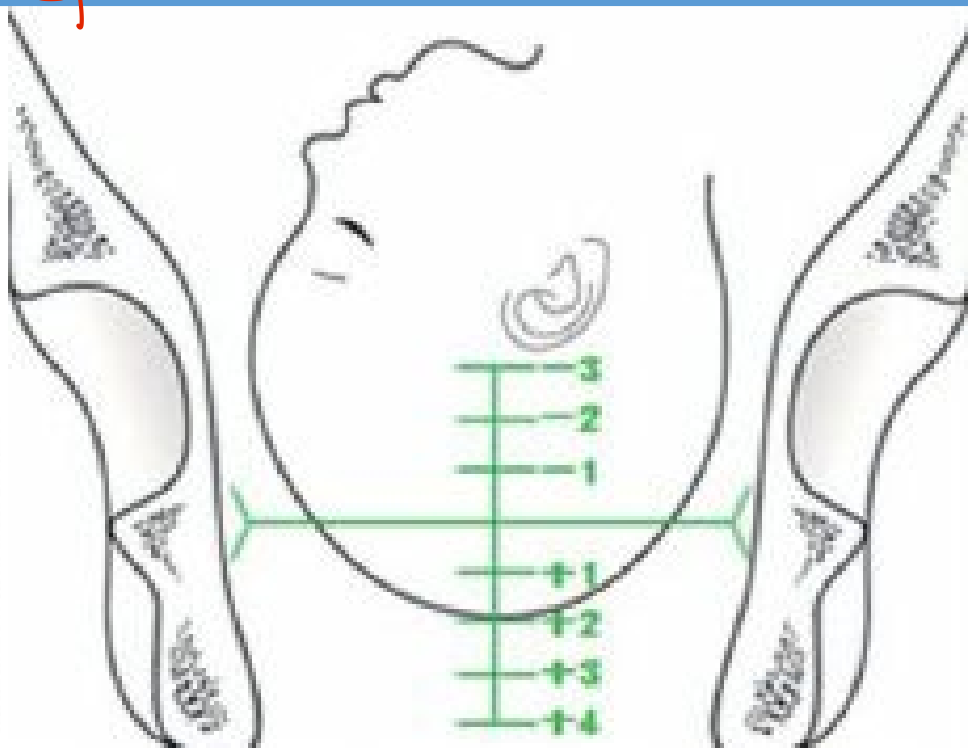
(- 3)

Q2: What's the station when the head is engaged?

(0)



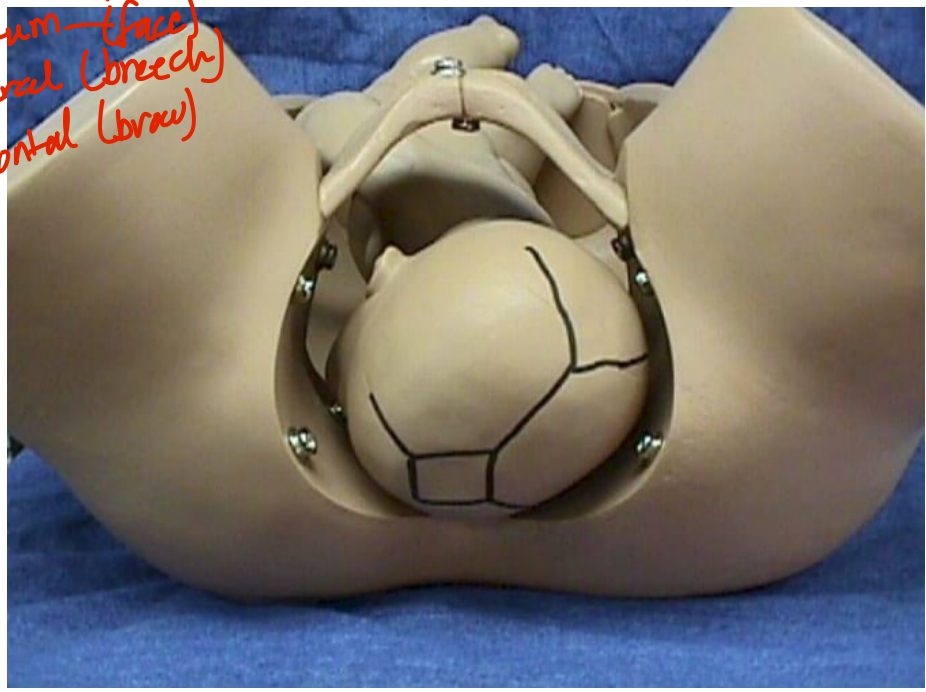




Q1: Define Position:

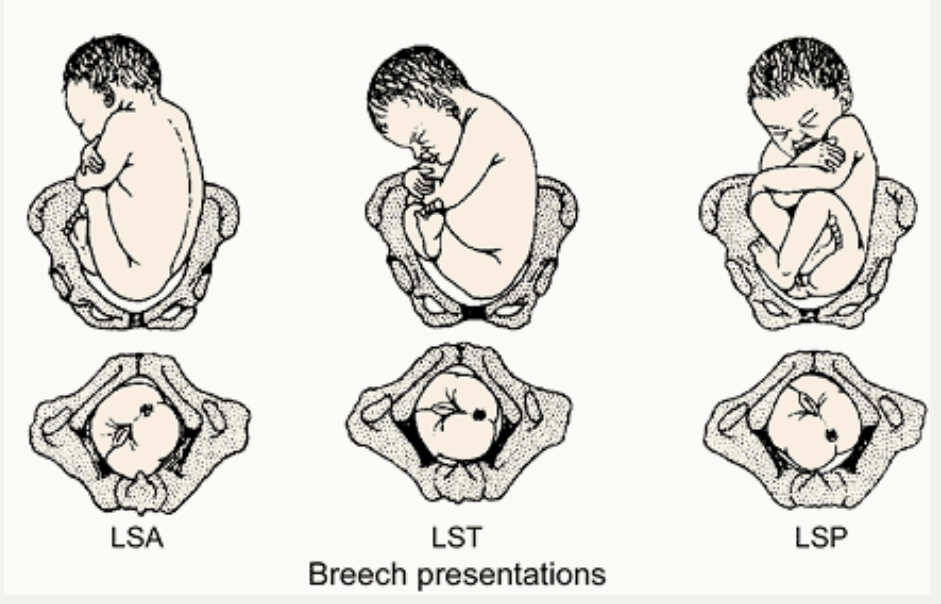
- Relation of denominator (occiput/ sacrum) of presenting part to the quadrants of pelvis e.g LOA, LOP

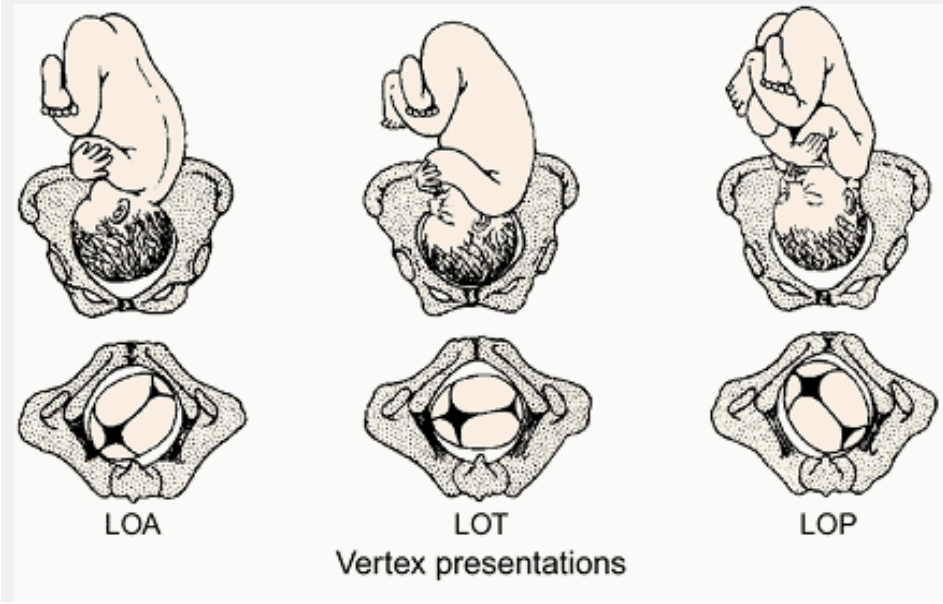
either occip ut (vertex)
mentum (face)
sacral (breech)
frontal (brow)

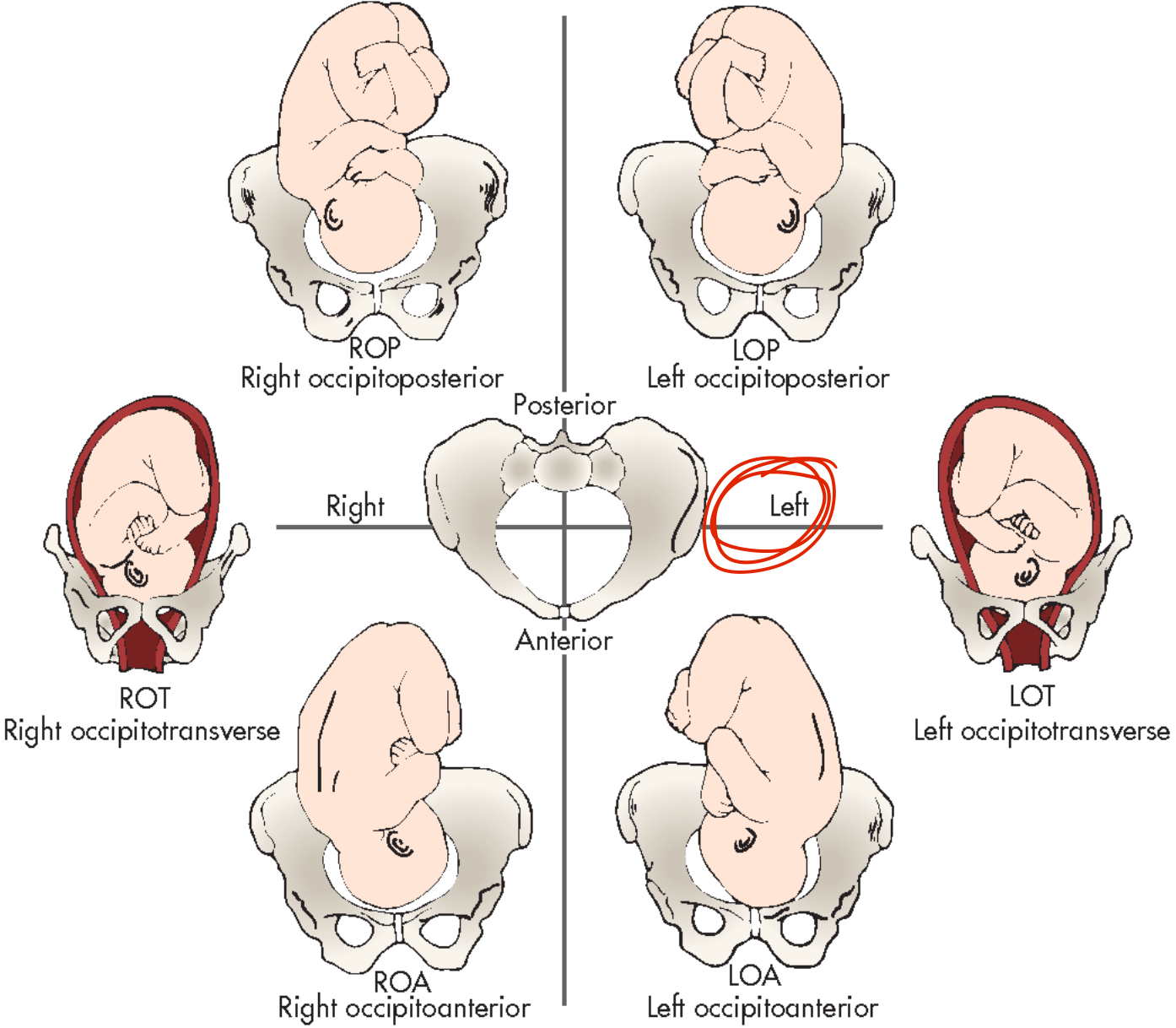


Q2: Name the position in this picture?

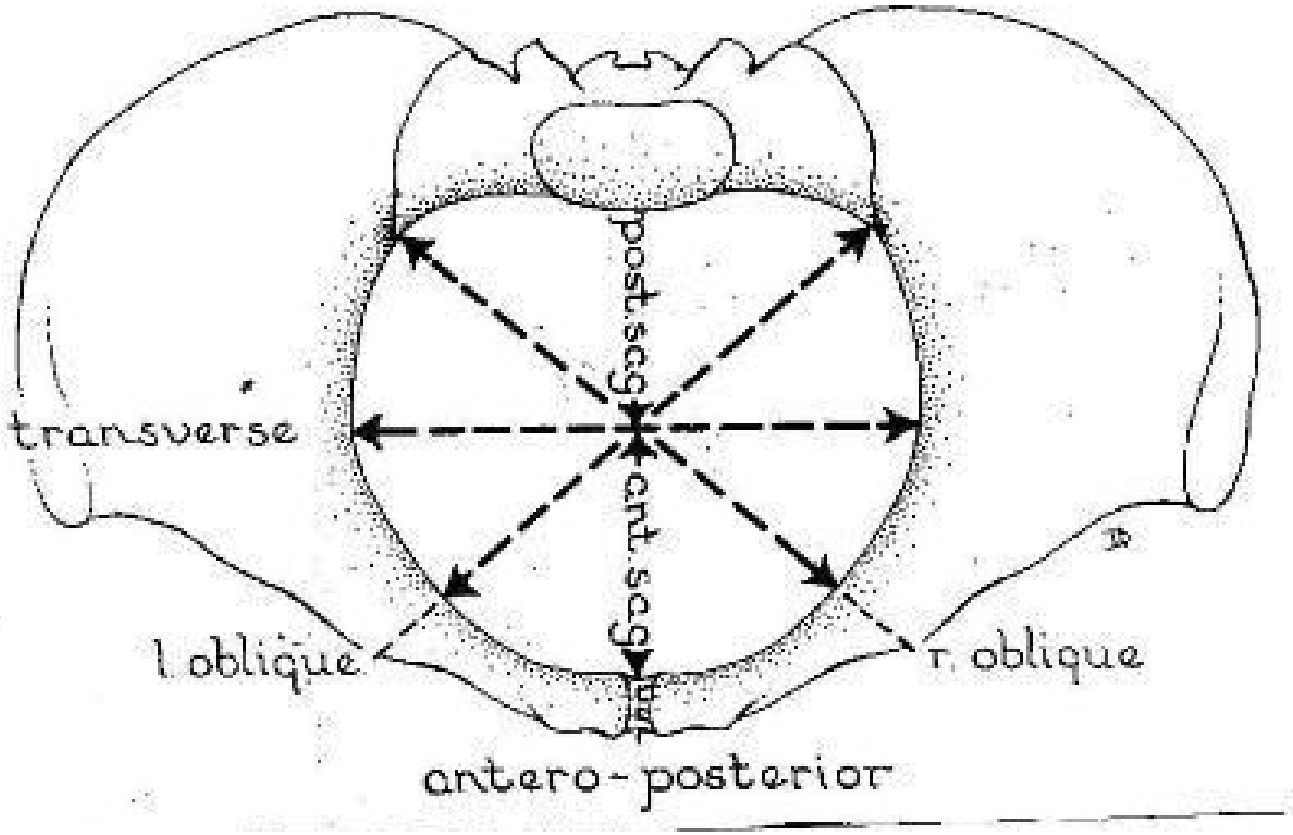
Left occiput anterior (LOA)





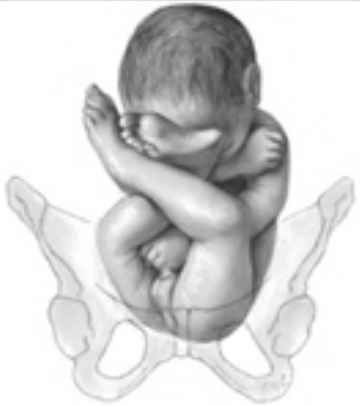


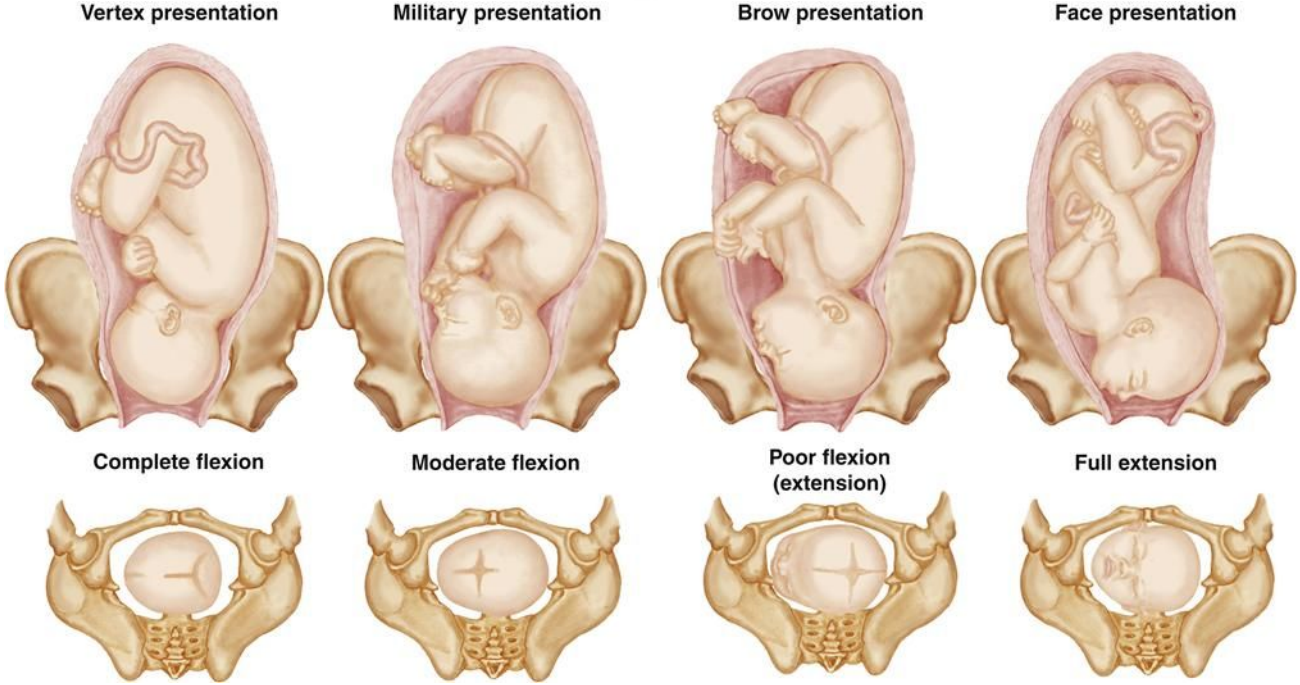
Lie: Longitudinal or vertical
Presentation: Vertex
Reference point: Occiput
Attitude: Complete flexion



Pelvic diameters:

- Anterio-posterior
- Transverse
- Oblique

Frank Breech (65%)	Complete Breech (10%)	Incomplete Breech (25%)	
		Footling Breech	Kneeling Breech
			
The baby's hip joints are flexed and knee joints are extended.	The baby's hip and knee joints are flexed.	The baby's hip and knee joints extended on one or both sides.	The baby's hip joints are extended and knee joints are flexed on one or both sides.



1. What's the diameter of the presenting part in Face/Brow?

- **Face:** Submento-bregmatic
- **Brow:** Occipito-mental /or mentovertical.

2. Which of the four presentations is delivered normally (vaginal)?

- Face presentation. (if mentum anterior)

3. can we deliver the brow normally? When?

Yes, it might flex to become vertex or extends to become face.

4. Name 2 risk factors for face presentation?

1) Prematurity.
2) Very low birth weight.
3) Fetal macrosomia
4) Cephalopelvic disproportion
5) Anencephaly

Q: Picture of breech and scenario of PPROM at 30 weeks:

1. Name this presentation:

- Complete Breech

2. Name three risk factors:

- Placenta Previa, Uterine Anomalies, Large Fibroids, Macrosomia

36–37 weeks.

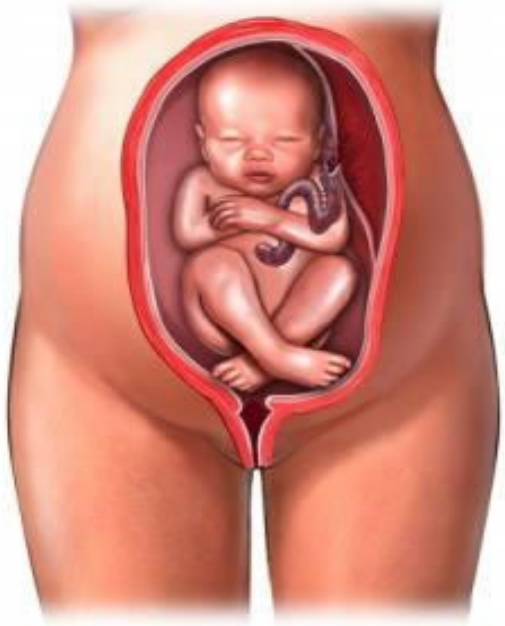
3. Name the procedure you do for this patient, and mention 3 pre-requisite for it?

- External Cephalic Version (ECV) ? why ?!
- GA more than 36, US, CTG, Check BP and pulse

1- reactive non-stress test + gain consent
2- U/S guidence
3- tocolysis + Regional anesthesia

4. Mention benefits for speculum for this patient (4 Points):

- Check the cord
- Presentation
- R/O Local causes
- R/O PROM



5. Mention benefits for US (4 points):

- R/O Placenta previa
- Check presentation, check the amniotic fluid

Q: P1,G0 Came to the ANC with this presentation:

1. What's the lie?

- Longitudinal lie

2. Give four causes of this presentation?

1) Extending legs preventing spontaneous version
2) Conditions preventing the presenting part from entering the pelvic cavity (masses, fibroids, ovarian masses, hydrocephalus)
3) Uterine Anomalies
4) Cornual placenta, Placenta previa
5) Preterm delivery

3. Give 2 complications of ECV?

- Preterm labor
- Abruptio placenta, Uterine rupture
- Cord accident

1. What type of breech is this?

- Footling Breech

2. What maneuver can you do to deliver with without CS?

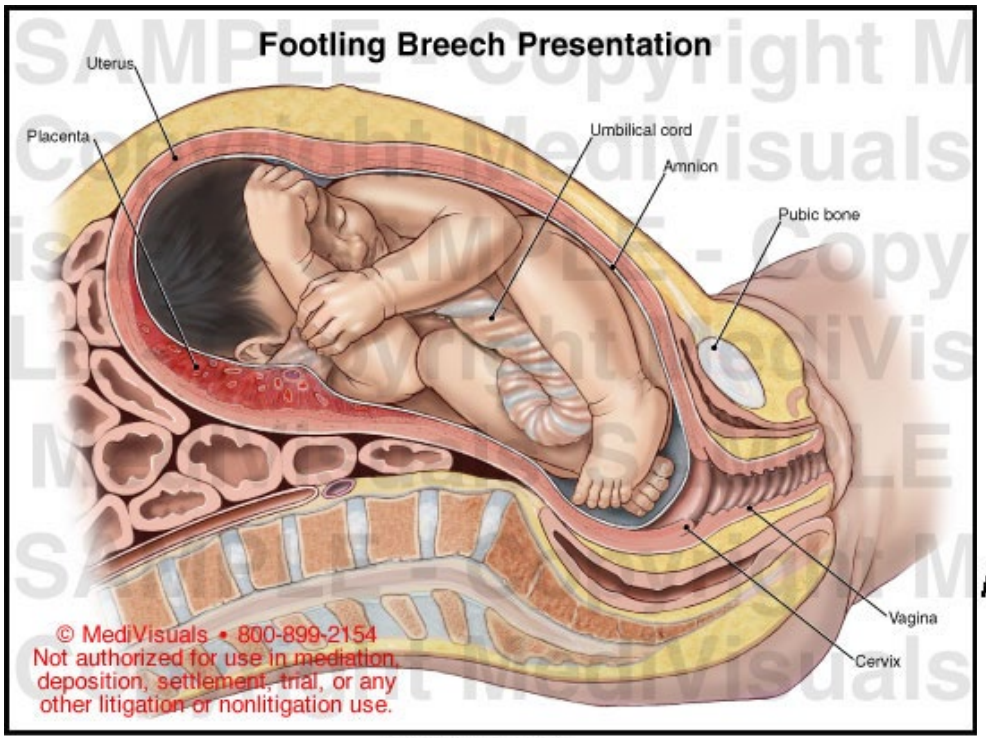
- External cephalic version (ECV)

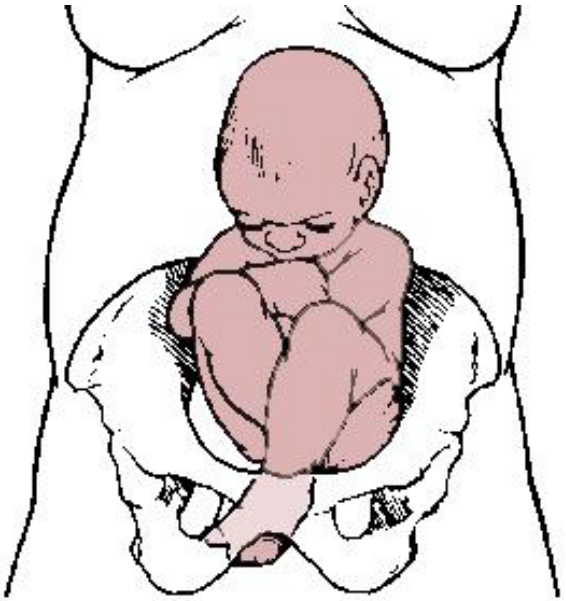
3. When can you do this maneuver and why?

- Only if breech is diagnosed before labor onset & GA is >=37

+ Pt should be NPO in case maneuver failed and CS is the solution

- Why? Because most breech become cephalic at birth





Footling (Incomplete) Breech

Q: Scenario about lady in first stage of labor.

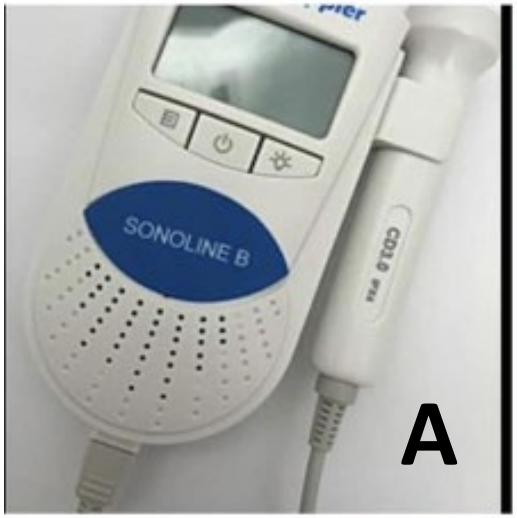
1. What is the name of the device in picture A & B ?

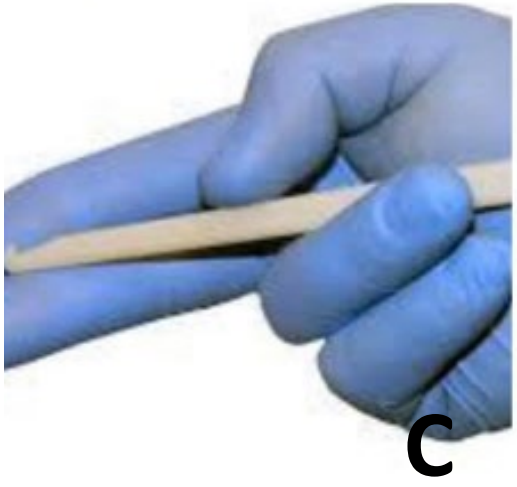
A: Sonicaid, Doppler fetal monitor, Intermittent Fetal heart monitor

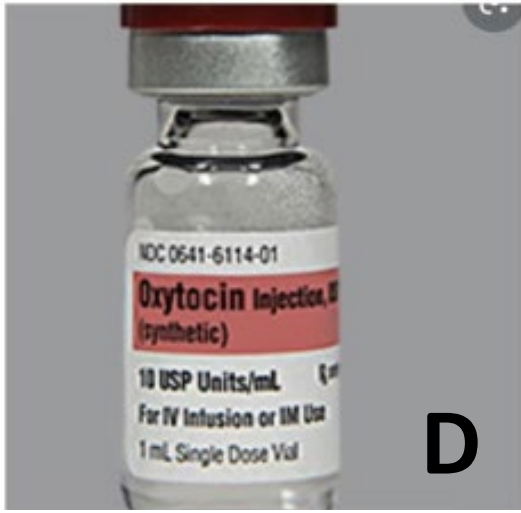
B: Cardiotocogram

2. Why is device A used for, and when/how?

Listen to fetal heart rate: every 15 minutes or after every other contraction (in the 1st stage)







3. What is in picture C? Why is it used for?

Amnio-hook, artificial rupture of membrane (amniotomy), shortens the length of labour if the woman is contracting regularly, or as induction

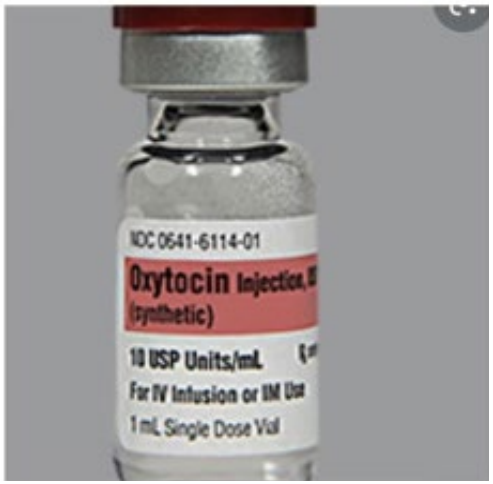
4. Give 2 indications for oxytocin.

Induction of labor, control postpartum bleeding

5. Give 2 side effects of oxytocin.

(1) Uterine hyperstimulation, fetal heart rate deceleration.

(2) water toxicity and hyponatremia



1. Mention three signs of obstructed labor?

1. Arrested cervical dilatation and descent
2. Large caput
3. Extensive molding
4. Edematous cervix and vulva
5. Maternal or Fetal distress
6. Ballooning of LUS and formation of a retraction ring Bandl's sign

2. Mention the characteristics of effective uterine contractions?

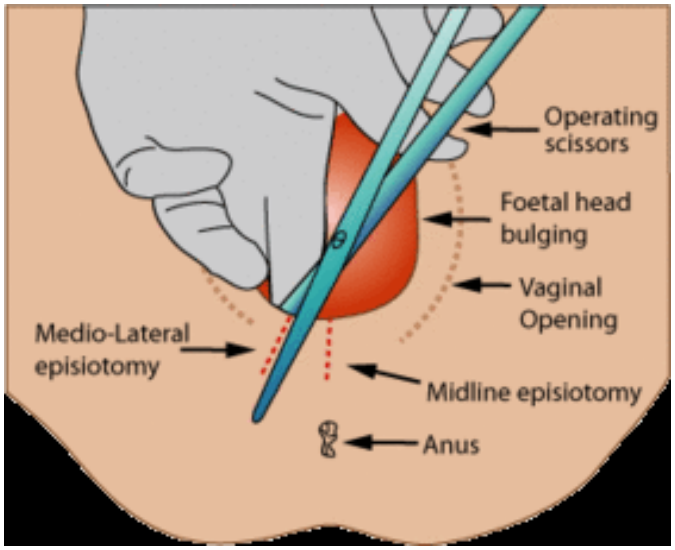
1. Frequency: 3-5/10 min
2. Intensity: >50 mmHg
3. Duration: 40-60 seconds

1. What is the name of the procedure?

- Episiotomy

2. Indications for it?

- To quickly enlarge the opening for the baby to pass
- Instrumental Delivery
- Shoulder Dystocia
- Narrow birth canal



3. Mandatory-prerequisite for it?

- Local anesthesia

4. What are the types?

- Midline and Mediolateral

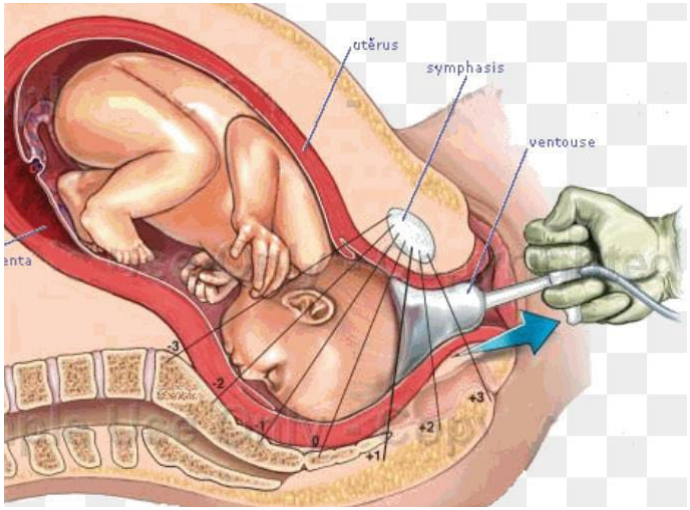
5. What are the advantages/disadvantages of each?

- Mentioned in the next slide

	Median	Medio-lateral
Merits	- Muscles are not cut - Less blood loss - Easy repair - Post-op comfort is maximum - Better Healing - Wound disruption is rare - Dyspareunia is rare	- Less rectal involvement - Incision can be extended
Demerits	- Extension involve rectum - Not suitable for manipulative delivery or abnormal presentation or position (in these cases it is selective)	- Extend to tissues/muscles - More blood loss - Post-op discomfort is more - More wound disruption - More Dyspareunia

1. Mention 2 indications?

1) Failure of progression in the 2nd stage of labor
2) Fetal or mother distress in the 2nd stage of labor



2. Mention 2 presentations CI?

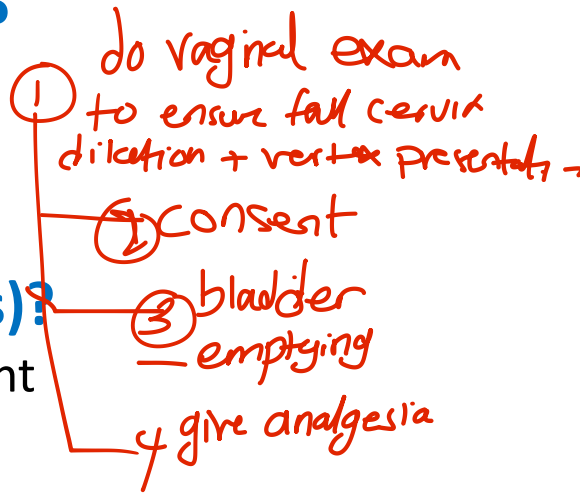
1) Face presentation
2) Breech presentation

3. Mention 1 maternal and 1 fetal complication?

- Maternal: perineal and genital laceration
- Fetal: scalp abrasion, retinal hemorrhage

Q4: What would you do before using it (4 points)?

1) Empty bladder
2) Uterine contractions present
3) Full cervix dilation
4) Known head position



1. Name this procedure?

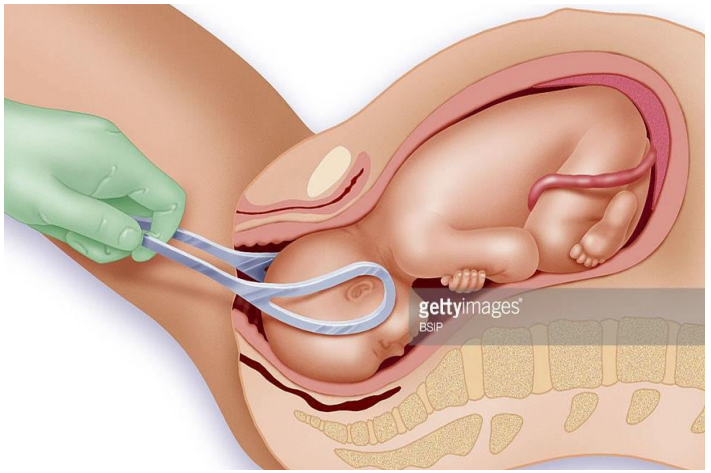
- Instrumental delivery via forceps

2. What are the types of such delivery?

1) Forceps (Simpson, Kieland)
2) Ventouse (Vacuum extractor)

3. Mention 1 maternal complication?

- Vaginal tears and lacerations
- Perineal tears including 3rd and 4th degree



4. Give 3 Indications?

1) Failure to advance in the 2nd stage
2) Fetal distress in the 2nd stage
3) Cord prolapse in the 2nd stage

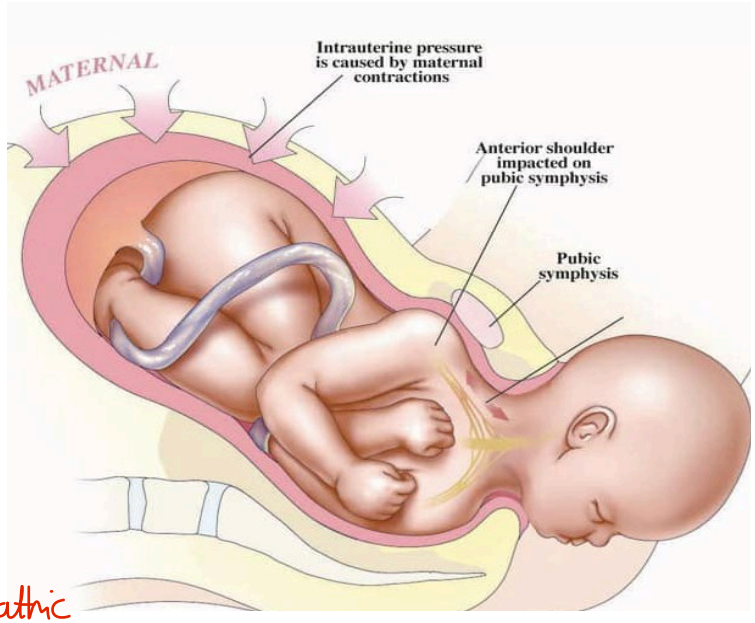
5. What are the pre-requests needed for this?

1) Cervix must be fully dilated
2) Uterus must be contracted
3) Head must be engaged → ① station → below ischial spine

② vertex
③ full dilated cervix
④ Ruptured membrans.

1.What is the name of the condition in this image?

Shoulder dystocia



2. What is the incidence?

0.2-3% (other books say 1%)

3. Mention 3 risk factors?

Maternal DM, obesity, post date pregnancies, fetal macrosomia, prolonged 1st or 2nd stage of labor, Hx of shoulder dystocia

4. Mention 3 fetal complications that can occur?

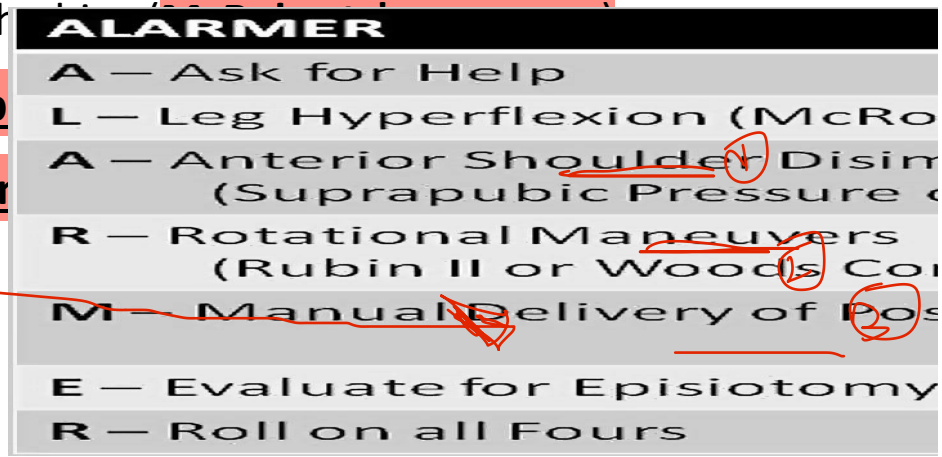
Brachial plexus nerve injuries, Erb's palsy, fetal humeral/clavicular fractures, hypoxia/death, permanent neonatal neurological damage

Q5: Mention 4 maneuvers to deliver the baby?

- McRoberts Maneuver
- Suprapubic pressure
- Zavanelli maneuver
- Woods screw maneuver
- Rubin maneuver
- Manual delivery of the posterior arm

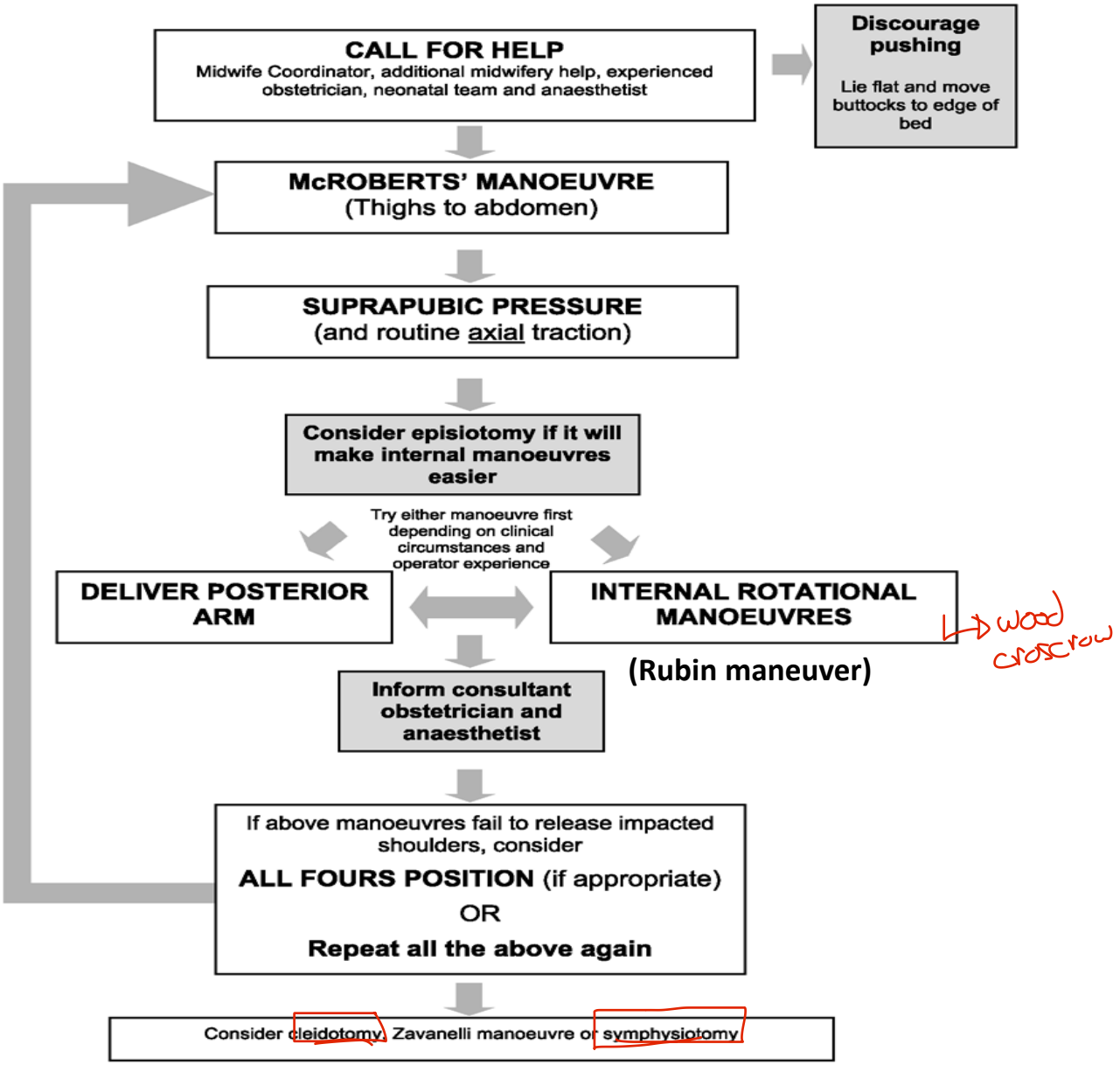
Management of shoulder dystocia

- The steps to treating a shoulder dystocia are outlined by the mnemonic **ALARMER**:
- **A**sk for help. This involves asking for the help of an obstetrician, anesthesia, and for pediatrics for subsequent resuscitation of the infant that may be needed if the methods below fail.
- **L**eg hyperflexion and abduction at th
- **A**nterior shoulder disimpaction (**sup**
- **R**otation of the shoulder (**Rubin mar**
- **M**anual delivery of posterior arm
- **E**pisiotomy
- **R**oll over on all fours

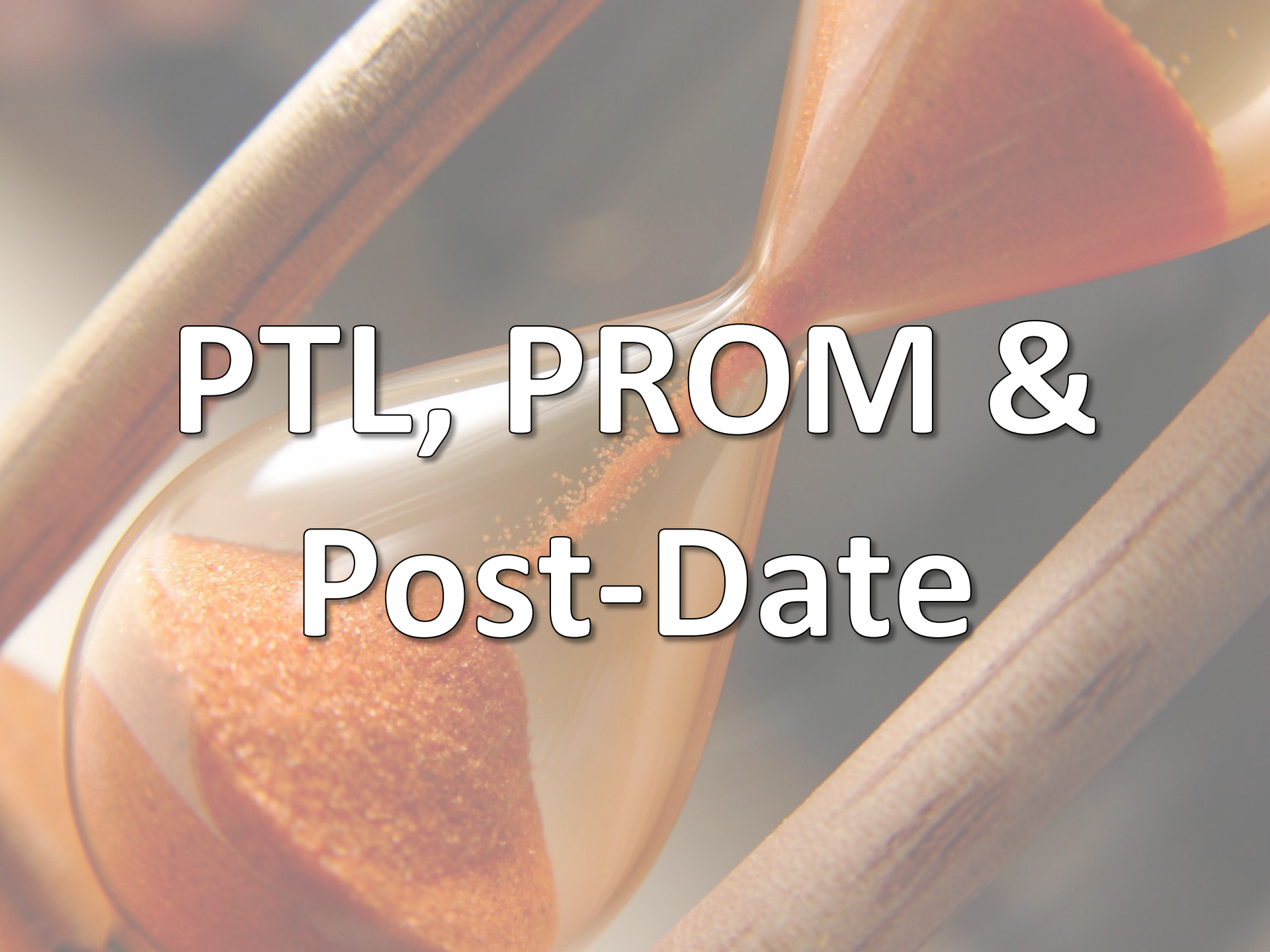


- Typically the procedures are performed in the order listed and the sequence ends whenever a technique is successful.
- Intentional fracturing of the clavicle is another possibility at nonoperative vaginal delivery prior to Zavanelli's maneuver or symphysiotomy, both of which are considered extraordinary treatment measures.
- Pushing on the fundus is not recommended.

Algorithm for the management of Shoulder Dystocia



Baby to be reviewed by neonatologist after birth and referred for Consultant Neonatal review if any concerns


PTL, PROM &
Post-Date

Q: 24 y/o lady,28 GA, came complaining of regular uterine contractions 3/10 min. & on PV the cervix was 2 cm dilated.

1. What's the Dx?

- PTL (preterm labor)

2. Give 2 causes?

- previous PTL
- Polyhydramnios
- Twin Gestation
- Smoking, alcohol, drugs

3. 2 Investigations to do?

- Fetal fibronectin
- Cervical length TVS
- Ultrasound

4. 2 lines of Mx?

- Bed rest & hydration
- Maternal steroids
- Tocolytics
- Antibiotics (Erythromycin)
- Fetal assessment

5. 3 maternal complications:

- Tocolytic risk
- Postnatal Depression
- Prolonged labor
- Infections risk
- C/S

6. 3 fetal outcomes:

- RDS
- NEC
- PDA
- Jaundice
- Retinopathy
- Feeding difficulty
- Hypothermia

Q: 35 GA pt with vaginal leakage of fluid:

1. Give DDx:

- Seminal fluid collection: sexual intercourse
- Amniotic fluid: PROM
- Infections: UTI, vaginal
- Urinary Incontinence
- Leucorrhea
- Abruption of the placenta

2. History of PROM?

- Gush of watery fluid from the vagina followed by continuous dribbling (we care for timing, amount, color, odor)

3. How will you manage?

- Admission
- Stabilize
- Give antibiotics
- Induction of labor

Management depends on GA; this patient is 35 weeks

Q: 22 y/o lady ,33 weeks gestation came complaining of gush of fluid per vagina for 2 hours.

1. most common cause:
- PPROM (33 weeks)

2. What do you look for in Speculum?
- Pool of fluid post vagina
- Positive Cough Sign
- Cervix for dilatation
- Cord prolapse

3. Investigations Done?
- Nitrazine test
- Ferning pattern
- Genital tract swabs
- Maternal wellbeing (vital signs/ WBC/CRP → early markers for infection)
- Fetal wellbeing (Serial NST)
- Ultrasound
- Speculum
- AmniSure test

4. Mention 3 lines of Mx:
- Admission
- Antibiotics (Eryhro/Clindamycin)
- Corticosteroids

5. Mention 3 Complications:
- Fetal Distress
- PTD
- Cord prolapse
- Operative Delivery
- Hyaline membrane disease
- Abruption
- Chorioamnionitis

6. What do you look for in abdominal exam (name 4 points):
- Fundal height, lie, presentation, oligohydramnios, uterine tenderness

8. If the fetus was breech and the patient is term what is the mcc, and is there any maneuver that can be done to prevent C/S?

- Placenta Previa
- External Cephalic Version (ECV)

9. Name 2 drugs for treatment and why?

- Steroids > fetal lung maturity
- Erythromycin for 10 days > to prevent chorioamnionitis

24-34 weeks

- Confirmation of diagnosis and presentation.
- Baseline FBC, CRP, swabs and MSU
- Ultrasound assessment of fetal wellbeing
- Steroids
- Oral erythromycin for 10 days
- MOD

34-37 weeks

- Controversial
- Immediate IOL
  - less hospitalisation
  - less perinatal infection
  - less NN morbidity

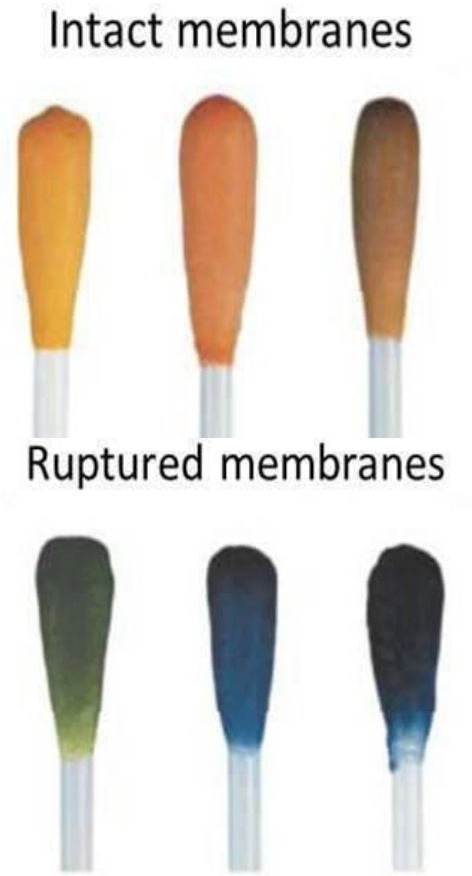
If there are signs of an infection or fetal distress on presentation or anytime during investigations, then **I.V antibiotics + immediate delivery regardless the GA**.

1. What is the name of the test?

- Nitrazine test

2. Other tests to confirm?

- Ferning pattern
- AmniSure ROM test



3. Name a Complication?

- Infection
- False Positive Results
- Discomfort

4. When to consider delivery?

- Individualized, in general if there was complications for either the mother or the fetus, we might tend for delivery

Q: 30w GA with painful regular (3/10min) uterine contractions, the cervix is 2 cm dilated, and the presentation is extended breech

1. What is your Dx:

- Pre-term labor

2. Mention 2 maternal complications?

- Post-natal depression
- Post-partum hemorrhage

3. Mention 3 causes for this?

- Uterine ascending infection
- Extra-uterine infection: Pyelonephritis
- Social causes: smoking, alcohol

4. Mention 2 ways to confirm the Dx:

- Fetal fibronectin
- Cervical length
- PV every 4 hours

5. What is you Mx (2 points):

- Steroids
- Tocolytics
- We might go for C/S

Q: 42 weeks pregnant, you want to induce labor.

1. Why would you induce labor:

- This lady is 42 weeks pregnant (post term), we want to do IOL because maintenance of pregnancy will increase maternal & fetal complications (fetal death, post maturity syndrome, dismaturity, meconium aspiration)

*Post term: 42 weeks and more

*Post date: between 40 weeks and 42 weeks

2. What are the components of Bishop Score?

a. Dilation
b. Effacement (%)
c. Station
d. Consistency
e. Position of the cervix

3. If Bishop score if 5, how will you induce labor?

- By Prostaglandins (IV Pitocin can also be used)

Bishop Scoring System

Score	Dilation (cm)	Position of cervix	Effacement (%)	Station (-3 to +3)	Cervical Consistency
0	Closed	Posterior	0-30	-3	Firm
1	1-2	Mid position	40-50	-2	Medium
2	3-4	Anterior	60-70	-1, 0	Soft
3	5-6	--	80	+1, +2	--

The modified Bishop score replaced cervical effacement with cervical length in cm, and its score is calculated as follows:

Score 0: cervical length >4 cm

Score 1: cervical length 3-4 cm

Score 2: cervical length 1-2 cm

Score 3: cervical length <1 cm

Mnemonic: Alphabetical order:

A – X

B – X

C – **C**ervical consistency

C – **C**ervical length

C – **C**ervix position

D – **D**ilation

E – Effacement (not used)

F – **F**etal station

1. Give 3 indications for elective cesarean section.

Transverse lie, previous 2 CS, placenta previa

2. How would you care for woman next day following cesarean section, 4 points.

1) Ambulation (Walking)
2) Passage of urine/stool/gases
3) Food/Drink intake
4) Drains/Catheters
5) Pain or any other significant S/Sx

3. Mention 2 early complications for CS.

Bleeding, surgical injury (bladder, ureter..)

4. Mention 2 late complications for CS.

DVT, incisional hernia

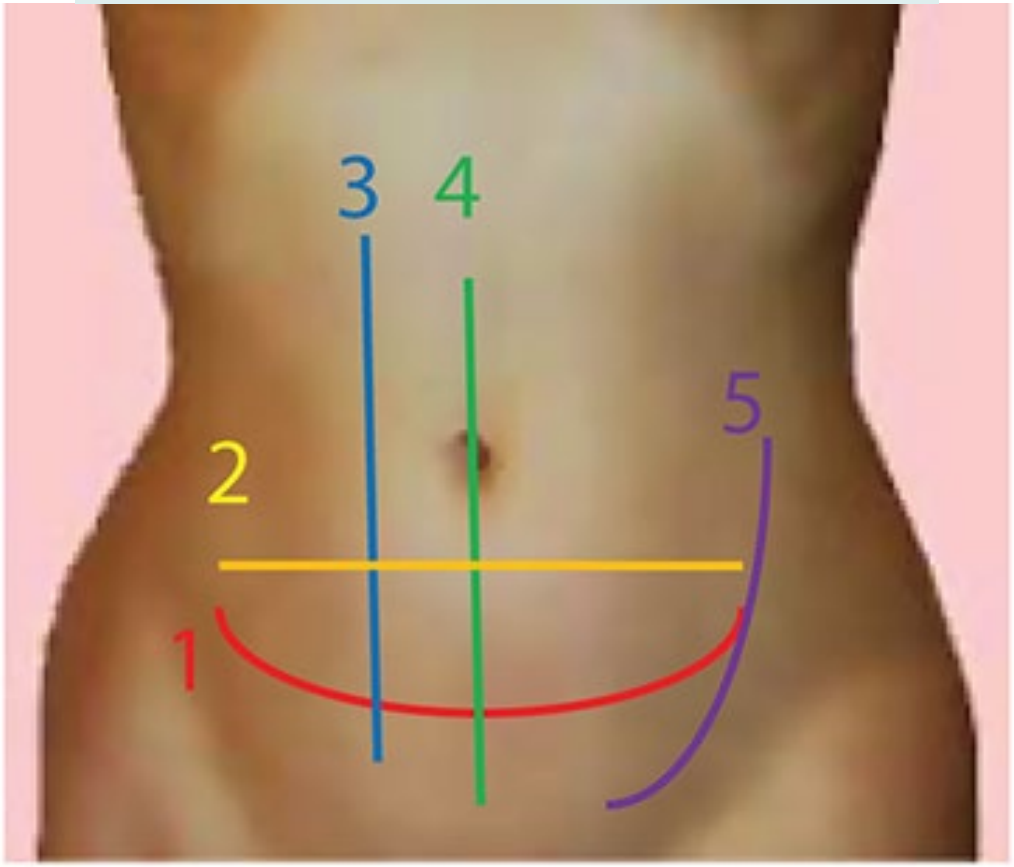
1 Pfannenstiel incision

2 Maylard incision

3 Paramedian incision

4 Midline incision

5 Modified Gibson incision




APH & PPH

APH

to look for signs of shock
to look for fetal well being

1. What are you most concern about?

1) The diagnosis (Placenta abruption / Placenta previa .. Etc)
2) Fetal and maternal wellbeing (it might cause death!)

PPH

2. Investigations to order?

- FBC, Blood group and cross matching, CTG, US

3. What you look at in ultrasound??

1) Assess GA
2) R/O Placenta Previa
3) Assess the Amniotic Fluid Volume
4) Assess the Fetal Viability (Heart sound)

① to confirm or exclude placenta previa
② to Look for fetal viability and pulsation of fetus.

4. What do you do to decrease maternal and neonatal mortality?

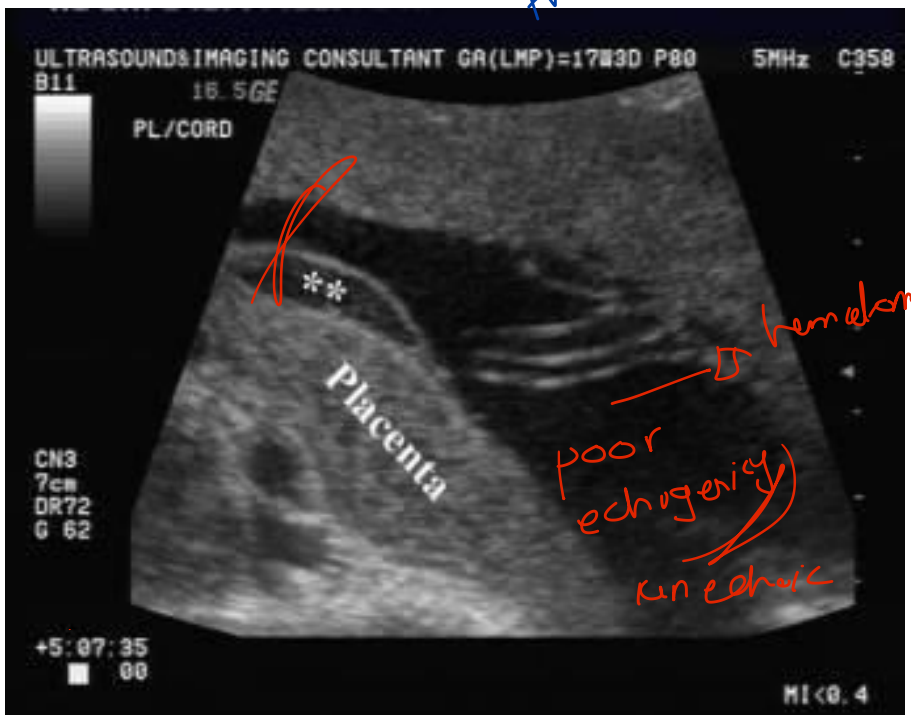
- Assessment (Amount of blood loss, Fetal Status, Mother Status)
- Resuscitation & Admission + identify the underlying cause and treat it.

1. What is the Dx:

- Placental Abruption

2. Causes, & which is the most common?

- Hypertension (most common cause)
- Previous abruption
- Trauma
- Chorioamnionitis
- Abnormal placentation
- Increasing maternal age
- Increasing parity
- Smoking
- Drug misuse (cocaine)
- Anemia
- Prolonged ROM >24 hours



3. Treatment?

Management depends on amount of blood loss, status of the fetus and mother and GA but generally:

- Admission
- Conservative: steroids
- Deliver (we tend to go for vaginal)

Q: 34 weeks pregnant lady complaining of vaginal bleeding:

1. Mention two initial Dx:

- Placenta Previa
- Abruptio Placenta
- Any other local causes

2. Three points to ask in Hx?

- Hx of similar attacks
- Abdominal pain, amount and color of blood
- Uterine scars: previous C/S, myomectomy, D&C..

3. What is your initial investigations?

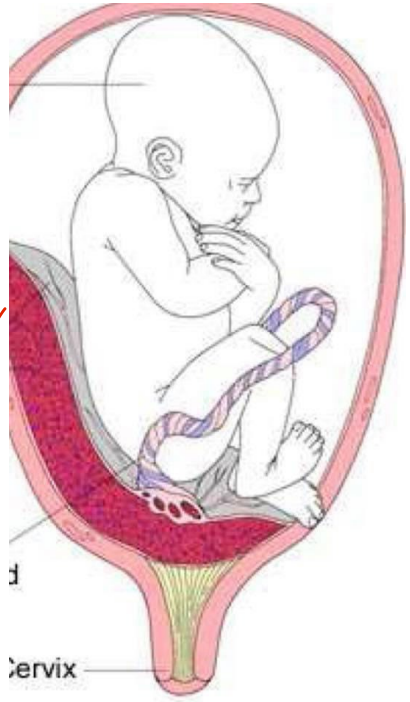
- Abdominal US

4. If she was stable how will you manage her (3 points)?

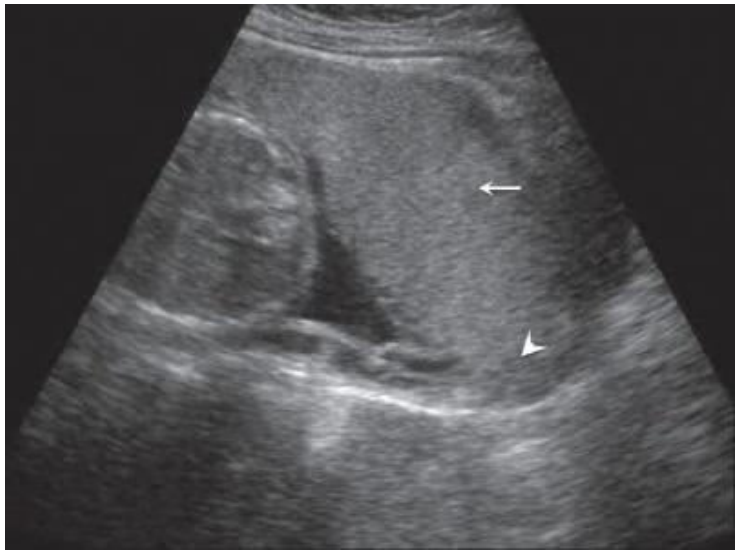
- Admission
- Blood type and cross matching
- Steroids (Dexamethasone – for lung maturity)
- Anti-D if indicated

5. What is the MOD?

- C/S



Q: 37 y/o pt, with a Hx of two C/S presented with this US:



1. What is the Dx?

- Placenta Previa

2. Mention two risk factors?

- Scarred uterus (previous C/S) + previous previa
- Age (>35)

- endometritis
- curr algae
- manual removal of placenta

3. Mention the grades of this condition?

- Grade 1: low lying – lower segment but does not reach os
- Grade 2: Marginal – reaches os but does not cover it
- Grade 3: Partial – cover part of the os
- Grade 4: Complete/Central – completely covers the os

< 2cm the distance btw lower margin of placenta and i cer os.

4. Mention two complications on the mother and the fetus?

- Major hemorrhage, shock, DIC, C/S
- PTL, PTD, fetal distress, IUGR, IUFD

- anemia
- maternal shock

- pre maturity
- hypoxia / IufD, IUGR.

Q: 30 y/o, presented with 15 min bleeding after NVD:

1. What is the Dx?

- Primary PPH (primary if within 24 hr, secondary if after)

2. Mention four causes?

- 4 T's (Tone, Tissue, Trauma, Thrombin)

coagulopathy

Atony (most common), Retained tissue, Trauma, Thrombin (bleeding disorder)

3. Mention two complications?

- Sheehan Syndrome, Hypovolemic Shock, Asherman Syndrome, Transfusion Hepatitis, DIC, Anemia

Q: PPH

1. Mention 8 risk factors?

1) Over distended uterus (multiple pregnancies, polyhydramnios, macrosomia)
2) Instrumental deliveries
3) High parity
4) APH
5) Drugs: Oxytocin, MgSO4, Halothane
6) Prolonged Labor
7) Precious PPH
8) Bacterial toxins (endometritis, chorioamnionitis, septicemia)

pre eclampsia
placenta accreta

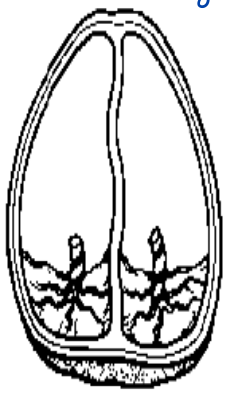
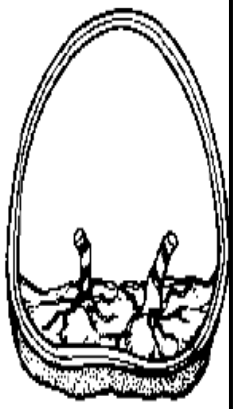
2. Mention 8 lines of Mx?

1) Call for help
2) ABC
3) 2 large IV lines
4) Foleys catheter
5) Anti-D (if Rh (-))
6) Uterine Massage
7) Uterine Packing
8) Uterotonic drugs - Oxytocin
9) Internal iliac artery ligation
10) B-Lynch Suture
11) Hysterectomy (last option)

why

① massage
② oxytocin
③ ergometrine
④ PGF2α
⑤ misoprostol
⑥ Balloon tamponade
⑦ B Lynch
⑧ ligation
⑨ TAH

Twins

Zygote	Dizygotic	Monozygotic		
Day of division		0–3	3–8	8–13
Placenta				
Central membrane	2 Amnion 2 Chorion	2 Amnion 2 Chorion	2 Amnion	None

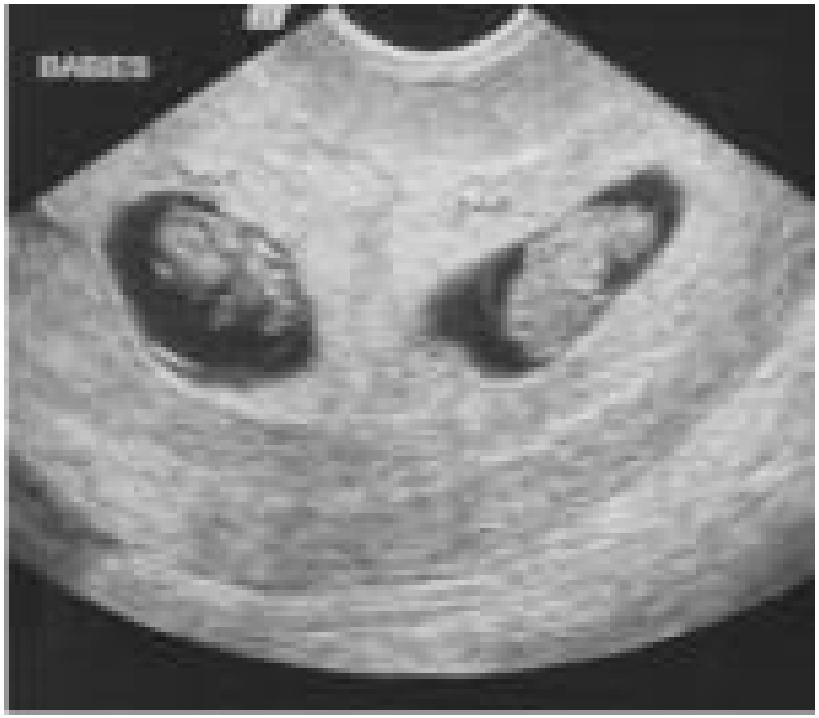
Dizygotic → **Dichorionic** → **Diamniotic** (Same or Different Sex)

Monozygotic

- → **Dichorionic** → **Diamniotic** (Split 0-3 – Same Sex)
- → **Monochorionic**
  - 99% → **Diamniotic** (Split 3-7 Days)
  - 1% → **Monoamniotic** (Split 9-13 Days)

* if split occur after 13 days (Siamese twins – v. rare)

Q: A 35 years-old patient, G2 P1 with the following US:



1. What is the likelihood for them to be identical?

- Not likely

2. What is it in terms of chronicity and amnionicity?

- Dichorionic and Diamniotic

3. What is the time of delivery?

37 Weeks

4. Mention two complications for the mother and two for the twins?

- Mother: Increased risk of: PTL, PPH, CS, HTN & PET, GDM, UTI… etc.

- Twins: Unequal weights (discordance), Prematurity, Congenital anomalies, Umbilical cord problems (single umbilical artery, velamentous cord insertion…)

1. Name of the sign?

Lambda sign

2. What is it in terms of chronicity and amnionicity?

Dichorionic Diamniotic

3. When was the time of cleavage in this case?

0 – 3 days

4. What are the risk factors for this condition?

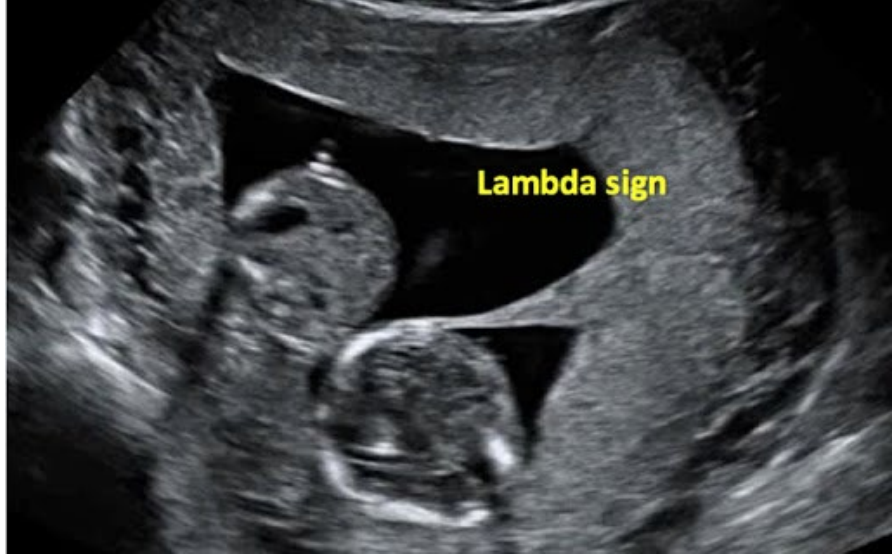
1) FHx

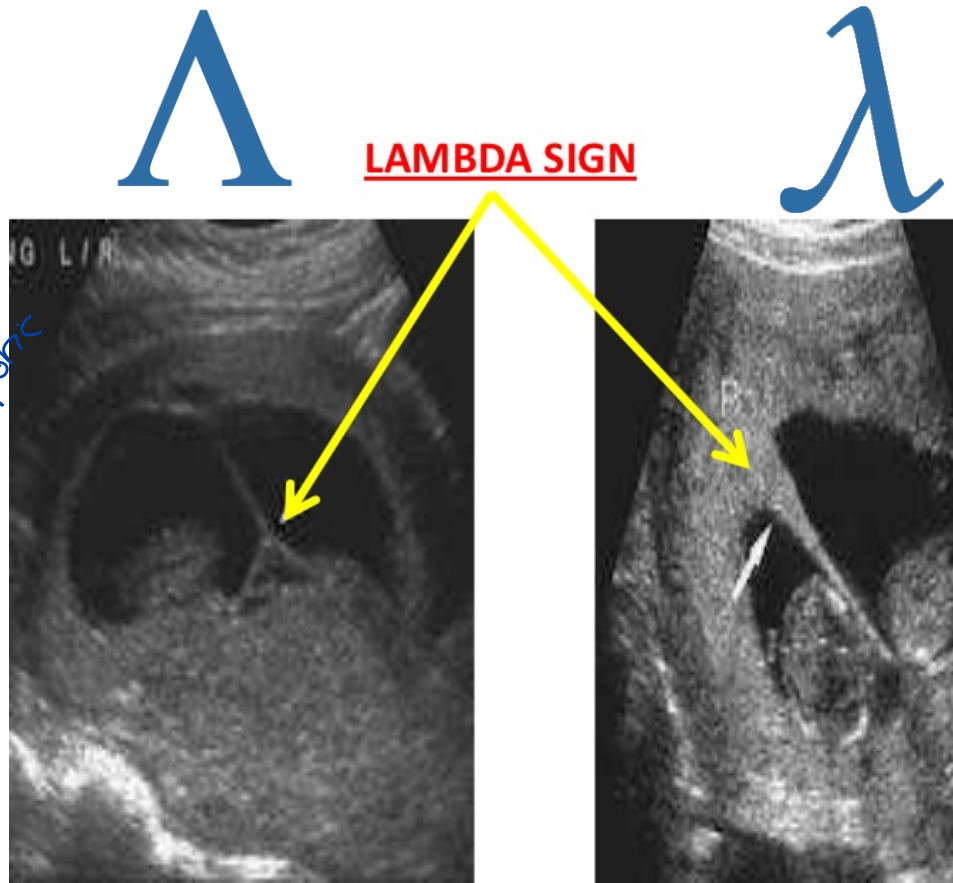
2) Assisted reproductive technology

3) Increasing maternal age

5. Name 2 Fetal complications?

TTTS, Fetal anomalies, weight discordance






Other Obstetric
Complications

Q: Hope is a 29 years old lady, 13 weeks gestation, complaining of recurrent vomiting that lets nothing stays in her stomach.

1: Define Hyperemesis Gravidarum:

- intractable vomiting
- greater than 5% weight loss of prepregnant weight
- dehydration
- ketosis
- electrolyte imbalance.

2: Mention two Maternal/ two Fetal complications?

Maternal	Fetal
• Hyponatraemia • Hypokalaemia • Vit B1 (thiamine) deficiency • Vit B12 & B6 deficiency • Metabolic hypochloraemic alkalosis • Mallory-Weiss tears	• small for gestational age • fetal growth restriction. • preterm delivery. • IUFD

3: Write four investigations you will order?

- Urine analysis for ketones
- Liver function test
- Electrolytes
- Thyroid function test
- HCT concentration

4: Four lines of management?

- admission + rehydration
- Corticosteroids
- antiemetic therapy and vitamins
- Thromboprophylaxis

Q: 30 years old lady, Para 6, previous CS, NVD 30 minutes ago and now suddenly patient collapsed .

1. What is the definition of maternal collapse?

- Any acute event involving the cardiorespiratory systems and/or brain, resulting in a reduced or absent conscious level (and potentially death), at any stage in pregnancy and up to six weeks after delivery.

2. How to position the mother?

- Left Lateral Position

3.Mention two causes for difficult intubation in pregnancy?

- Weight gain in pregnancy, large breasts inhibiting the working space and laryngeal edema can all lead to make intubation more difficult

4.Mention two causes for increase risk of aspiration in pregnancy?

- The pregnant woman is at a significantly higher risk of regurgitation and aspiration secondary to the progesterone effect relaxing the lower oesophageal sphincter and delayed gastric emptying, along with the raised intra-abdominal pressure secondary to the gravid uterus.

5. Perimortem cesarean, when to perform and why?

- After 4 minutes of Mx without improvement
- Why? To save the mother, decrease O2 consumption, to ease intubation and ease chest compression

6. What is the incidence of maternal collapse?

- 0.14 – 6 per 1000 births (as per the RCOG guidelines)

7. What is the most likely cause in this patient and why?

- Uterine rupture (multiparous, previous C/S)

8. Name 2 non-obstetric causes of maternal collapse?

- MI and Cardiac Tamponade (4 H's and 4 T's)

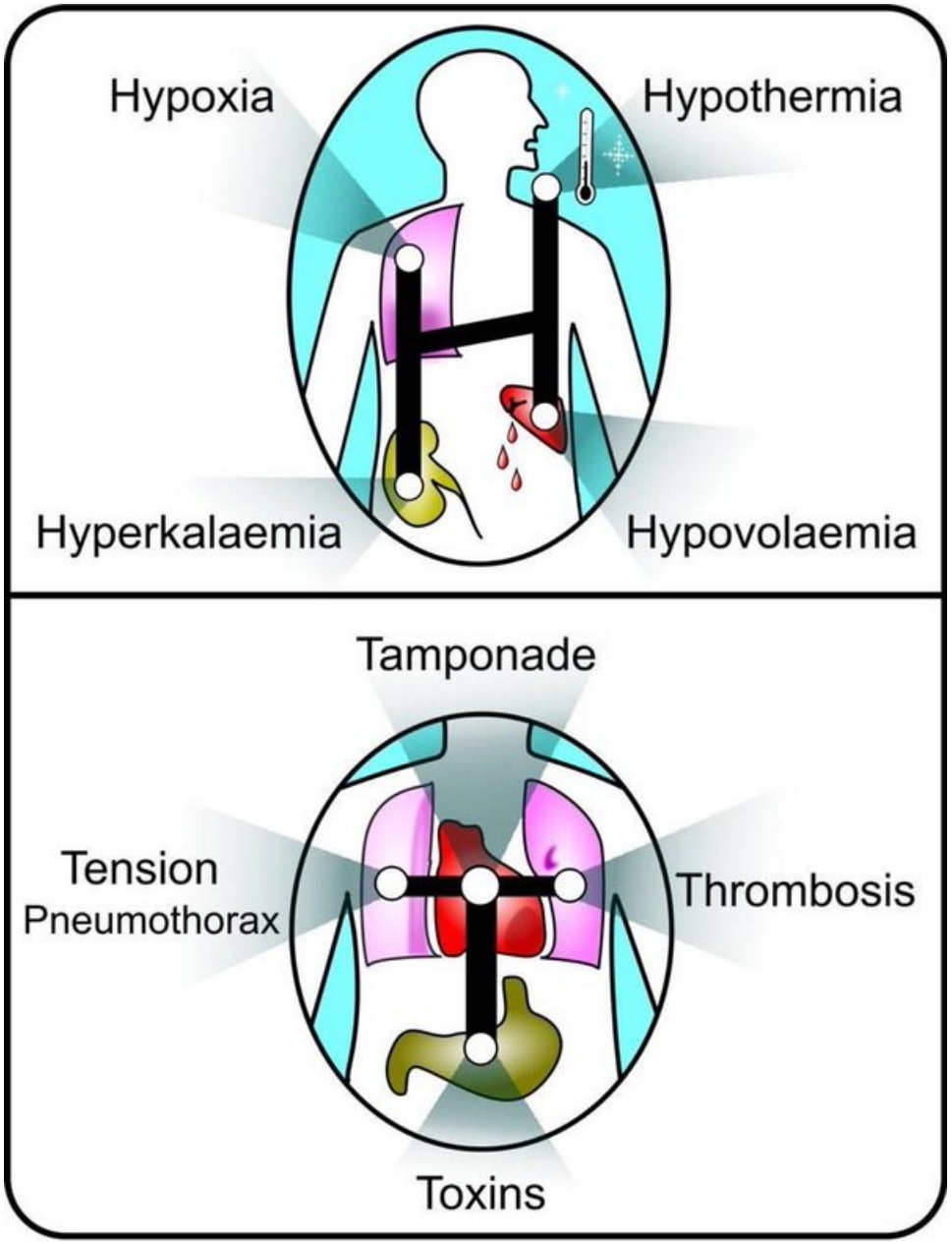
Q: Case of maternal collapse.

1. G6, 36 GA, comes for induction of labor, because of polyhydromionous, what is the most likely cause of collapse?

- Uterine Rupture

2. Mention 2 reversible causes in pregnancy and puerperium?

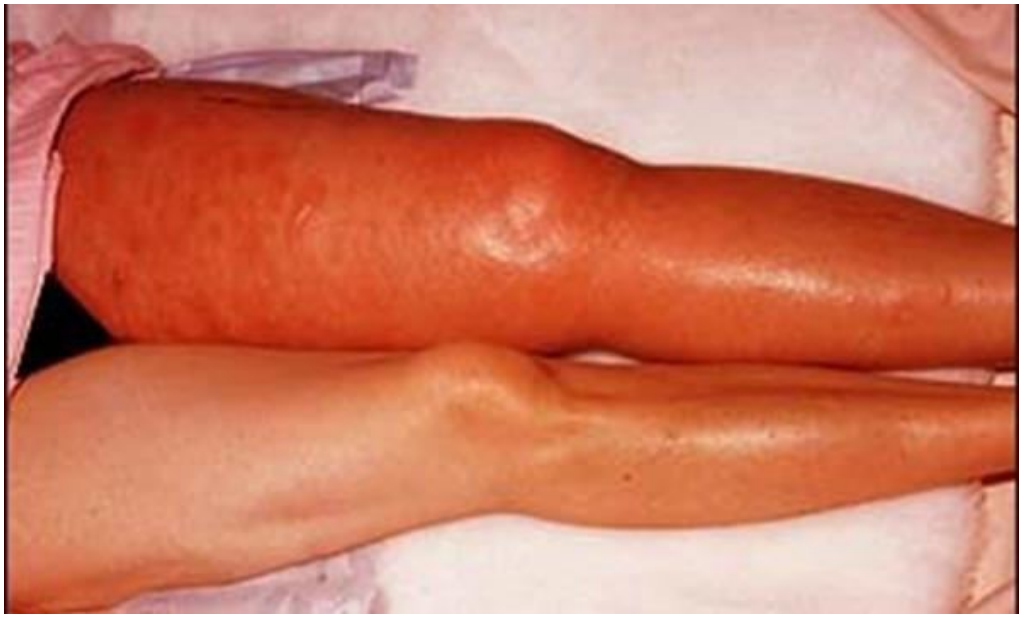
- 4 T's and 4 H's and PET



CAUSES OF MATERNAL COLLAPSE

Reversible cause		Cause in pregnancy
4 H's	Hypovolaemia	Bleeding (may be concealed) (obstetric/other) or relative hypovolaemia of dense spinal block; septic or neurogenic shock
	Hypoxia	Pregnant patients can become hypoxic more quickly
		Cardiac events: peripartum cardiomyopathy, myocardial infarction, aortic dissection, large-vessel aneurysms
	Hypo/hyperkalaemia and other electrolyte disturbances	No more likely
	Hypothermia	No more likely
4 T's	Thromboembolism	Amniotic fluid embolus, pulmonary embolus, air embolus, myocardial infarction
	Toxicity	Local anaesthetic, magnesium, other
	Tension pneumothorax	Following trauma/suicide attempt
	Tamponade (cardiac)	Following trauma/suicide attempt
Eclampsia and pre-eclampsia		Includes intracranial haemorrhage

Q: 37 y/o obese woman, G3P3, is now in her 1st day post-C/S.



1. What is the Dx?

- DVT

2. Mention 4 RF?

1) Pregnancy
2) Obesity
3) Major Surgical Procedures
4) OCP's
5) Immobilization

3. What is your plan in Mx?

1) Elevate legs + Elastic compression
2) Anti-coagulation by LMWH or low dose heparin

4. Mention 2 SE of the drug you chose?

1) Heparin induced thrombocytopenia
2) Osteoporosis
3) Allergic reaction

Q: The case was about lady that was complaining of lower abdominal pain and vaginal bleeding for the last 2 weeks, the bleeding got worse in the last few days, her last menstrual period was before 7 weeks, ultrasound was performed and revealed an empty sac with no fetal heart.

1. Give three differential diagnosis?

1) Missed miscarriage

2. GTD

3. Local causes (Cervical polyp)

4. Bacterial vaginitis

2. mention one clinical sign that support your diagnosis?

No Embryo on US (Empty Sac)

3. what are the lines of your management?

1) Expectant

2) Medical with uterotonics (misprostol)

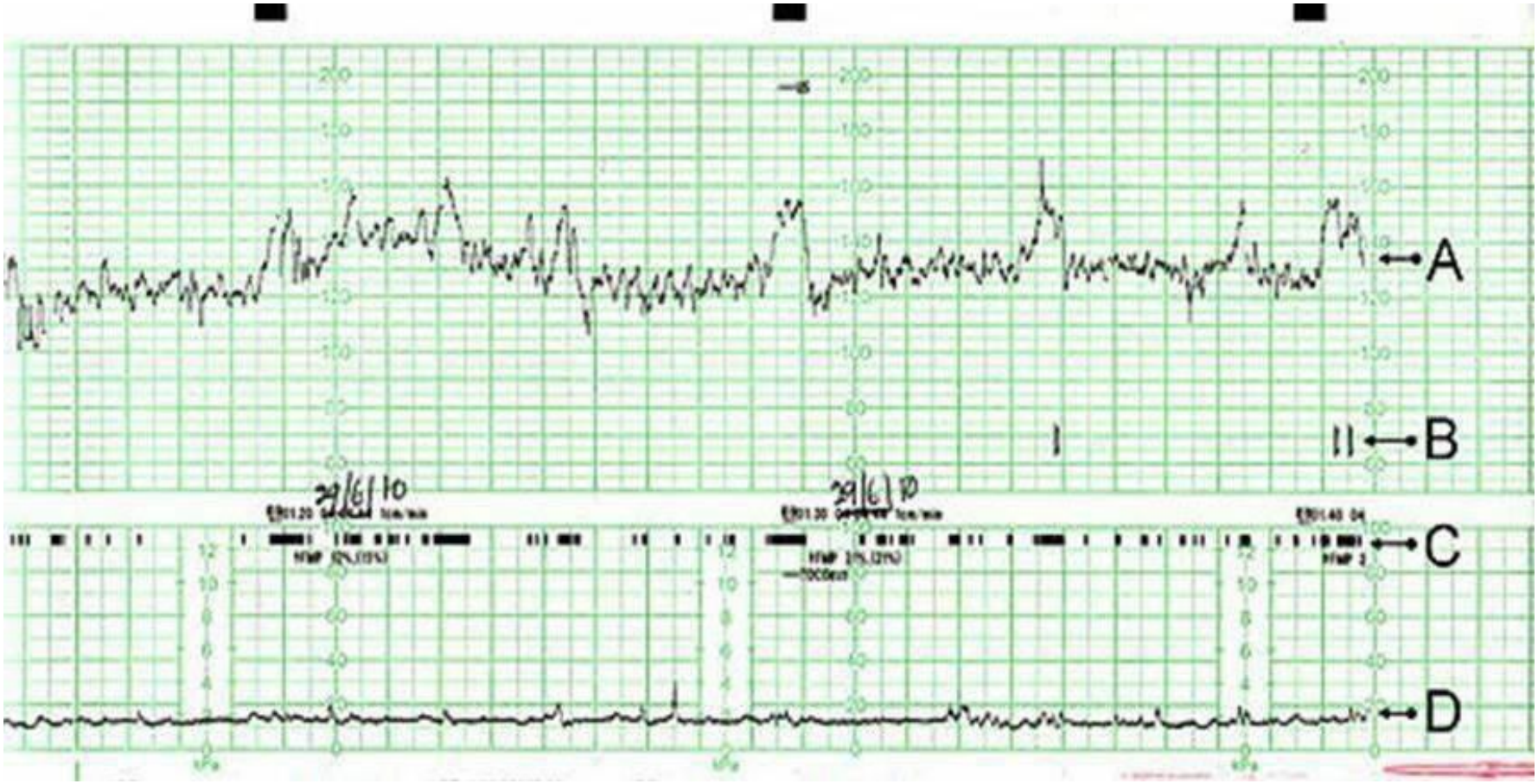
3) Surgical with D/C or E/C

4. if her blood group was negative and her husband's blood group was positive, what do you recommend ? (the aim of it was whether to consider anti-D in your management or not)

Yes I recommend anti-D


CTG & Partogram

Q: Sara 25 Y/O, primigravida, 41 weeks gestation, this test was done for her.



1. What is the name of this test?

Cardiotocography (CTG)

2. What does line B stands for ?

Fetal movement noticed by mother

3. Mention two other tests to be done.

BPP, Fetal scalp PH, Contraction Stress Test (CST)

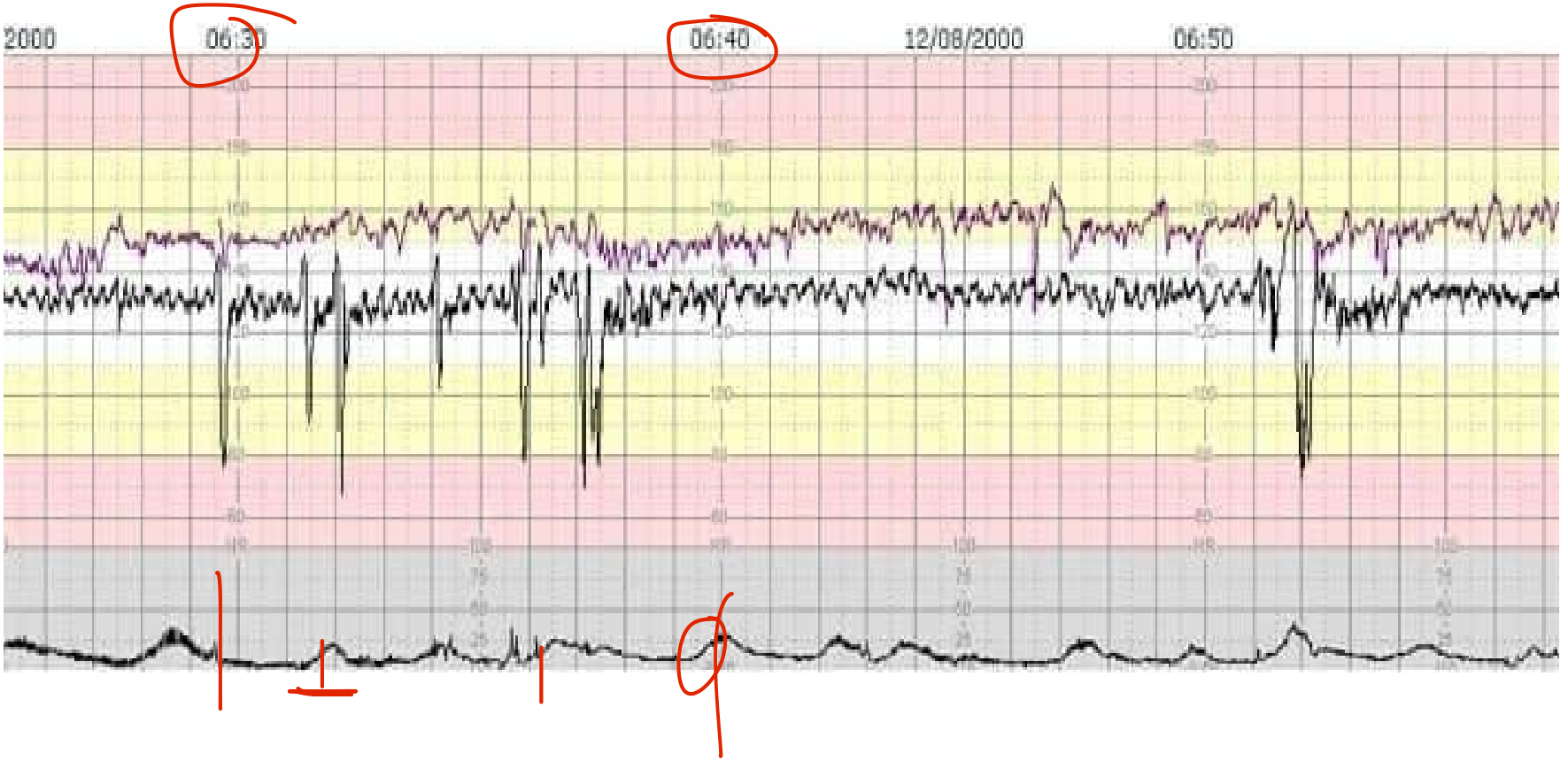
4. Write three things you should comment on.

Fetal heart rate, variability, presence of accelerations, absence of decelerations,…etc.

5. What is the next step of management

Admit to hospital and induce labor

Q: A CTG of a 36 weeks pregnant lady presented to the ER with bleeding:



1. What is your comment in this CTG?

- CTG of twins
- the FHR of the first is 160 and of the second is 140,
- good variability for both,
- accelerations present in the first,
- there is variable decelerations in the second,
- efficient uterine contractions are present

2. Mention 3 causes of her bleeding?

- Abruption placenta, placenta previa, local causes

3. Mention 2 fetal complications of monochorionic twins?

- Twin to twin transfusion syndrome (TTTS)
- Discordance

4. Mention 2 criteria for vaginal delivery?

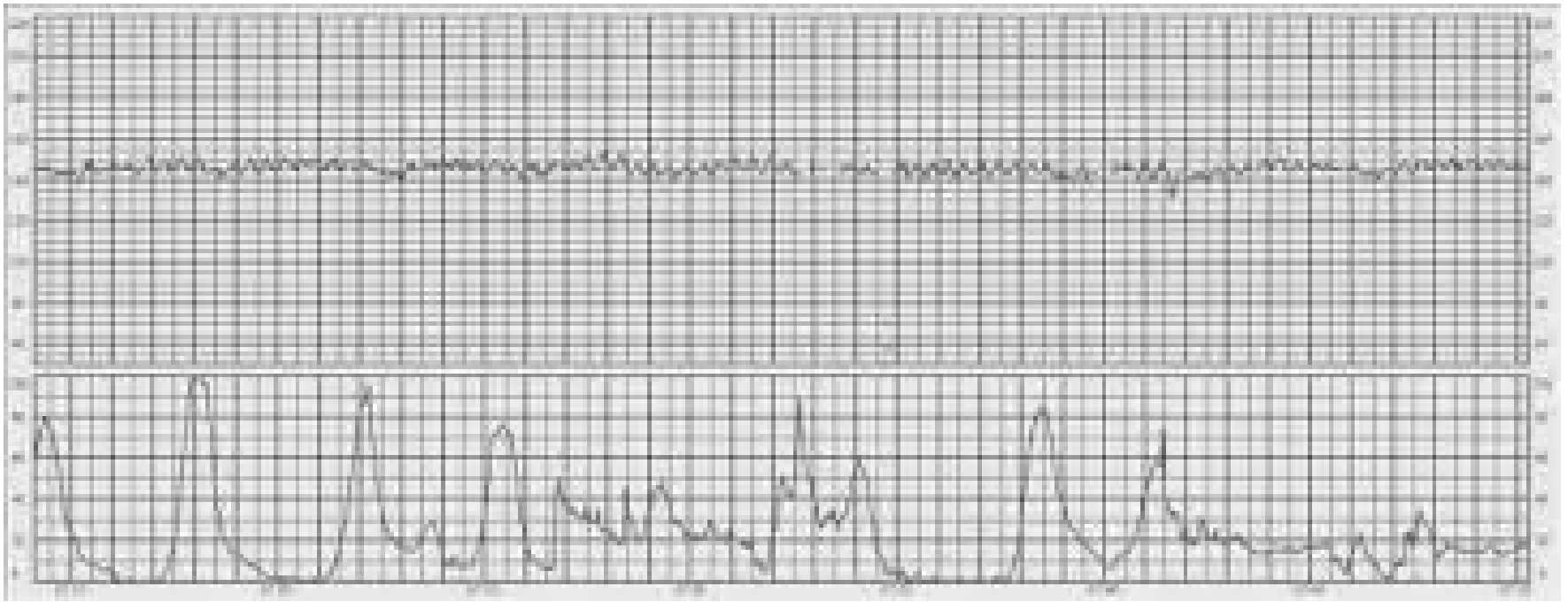
- The 1st twin is cephalic
- Diamniotic twins

1. Is it a screening or diagnostic test? And what is the false positive rate?

Screening (50% from google, 98% from Kaplan)

2. What is the most important thing to look for first? Why?

Presence of accelerations, because accelerations occurring alongside uterine contractions is a sign of a healthy fetus.



3. What are the criteria of the reactive test (the normal one)?

1) Presence of accelerations (≥ 2 in 20 min),
2) Absence of decelerations,
3) Basal FHR between 110-160 bpm,
4) Moderate variability

+ all other things are normal

4. What to do for this case if the cervical dilatation is 6 cm?

C/S delivery (not sure)

1. Mention 5 findings?

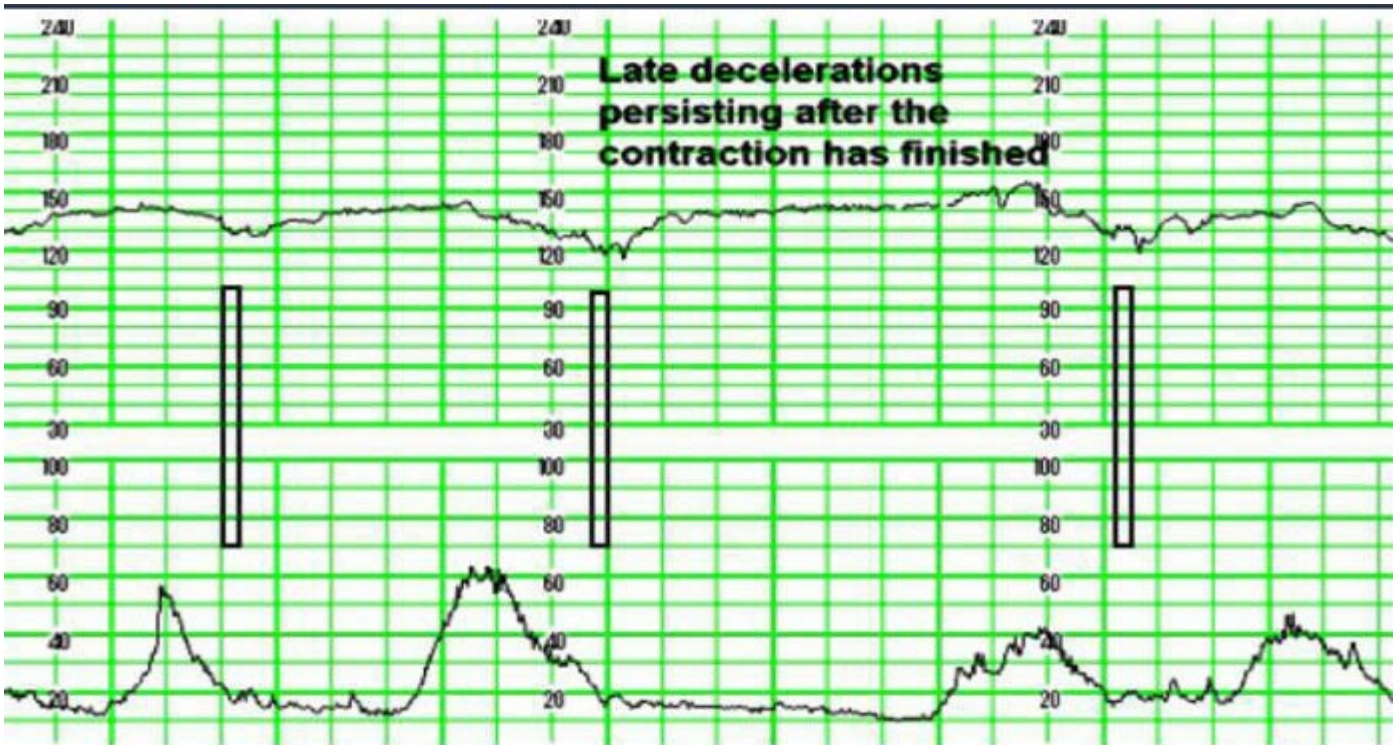
1) FHR 130 variability
2) Reduce beat to beat variability
3) No Accelerations
4) Late Decelerations
5) 3 Uterine contractions in 10 min

2. Mention 3 causes?

1) Uteroplacental insufficiency
2) Fetal hypoxia, Fetal sleep, Distress
3) Infection

3. If cervix is fully dilated, cephalic presentation, station +2, your Mx?

- Induction of labor



1. What is the most important abnormality, why?

- Reduce viability and no accelerations

2. What are the normal components for this?

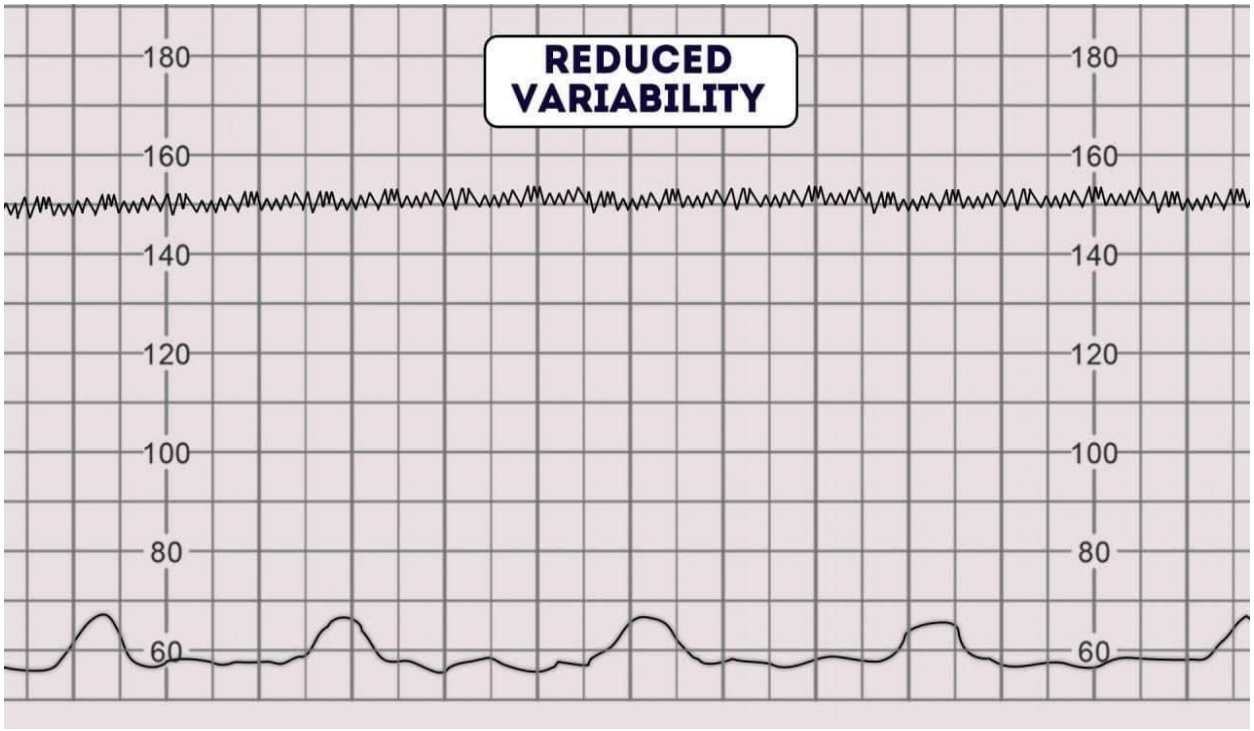
1) FHR
2) Variability
3) Accelerations
4) No decelerations
5) Uterine Contractions

3. What is the next step in Mx?

- Fetal scalp pH ? why ?!

4. If the cervix is 6 cm dilated, station +1, your Mx and why?

- Emergency C/S
- baby is in early stage of distress



1. What is the above tracing called?

CTG

2. What are the components of this tracing in the image?

FHR:130-140

Baseline: moderate variability

No accelerations

Late decelerations are present

2 contractions per minute

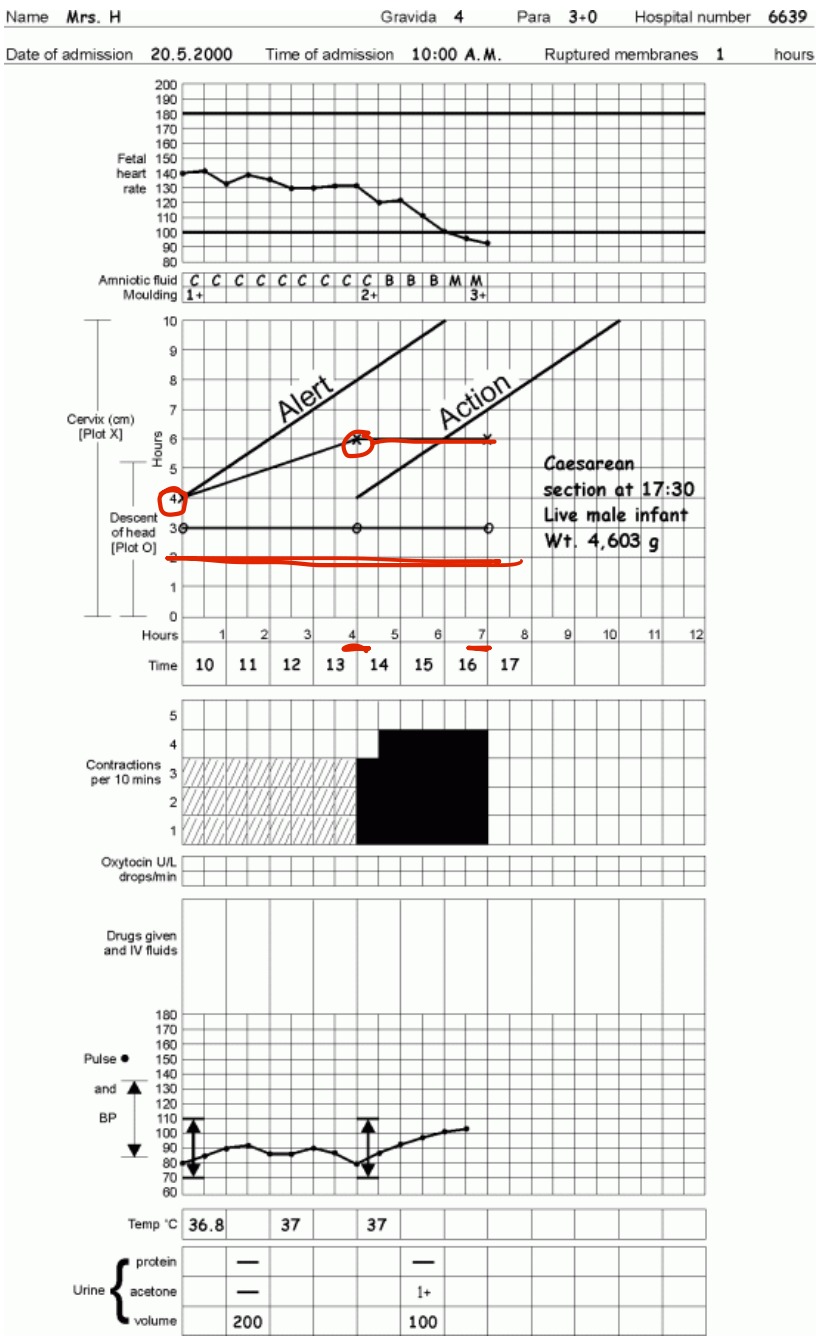
3. What are the causes of the above abnormality?

Acidosis, inflammation

Uteroplacental insufficiency

4. What is the next thing to do if the station is +2, cervix is fully dilated,, presentation cephalic?

Q: Sawsan is 25 y/o, G2 P1, 39 GA came to the ER complaining of regular uterine contractions and was admitted to the labor ward, and you used the following obstetrical device:



1. Name of the device?

- Tocogram/Partogram

2. What is your Dx?

- Obstructed Labor

Arrested cervical dilation

3. What findings did you see that support your Dx?

- Plateau of the head descend (mainly because of macrosomia)
- Fetal distress (FHR <100)

4. What do we measure with this device?

1) Patient identification
2) Time: It is recorded at an interval of 1 hour.
3) Fetal heart rate: It is recorded at an interval of thirty minutes.
4) State of membranes and color of liquor: "I" intact membranes, "C" clear liquor, "M" meconium stained liquor and "B" blood stained liquor.
5) Progression of labor: cervical dilatation and descent of the head.
6) Uterine contractions: Squares in vertical columns are shaded according to duration and intensity.
7) Drugs and Fluids.
8) Blood pressure: It is recorded in vertical lines at an interval of 2 hours.
9) Pulse rate: It is also recorded in vertical lines at an interval of 30 min.
10) Oxytocin: Concentration is noted down in upper box; while dose is noted in lower box.
11) Urine analysis
12) Temperature record


Instruments

1.What is this tool?

- Cusco’s speculum

2. Mention 3 Gynecological uses and 3 Obstetric uses.

Gynecological Uses	Obstetric Uses
Pap Smear	PROM
High Vaginal Swap	APH
IUCD Insertion & Removal	PPH

3. What is the other type of this tool & what is the indication for it?

- Sim’s speculum, used in D&C

4. What is the main pre-requisite for this procedure?

- Patient’s consent

1- what do you comment on in the first image?

-color, time and date of insertion, site, presence of inflammation

2- what is the object in image 2 called? Redivac

- What is its type? Closed negative pressure active drain

- when do you remove it?

When the output is less than 50ml in 24h, serous fluid

3-what do you comment on the image 3?

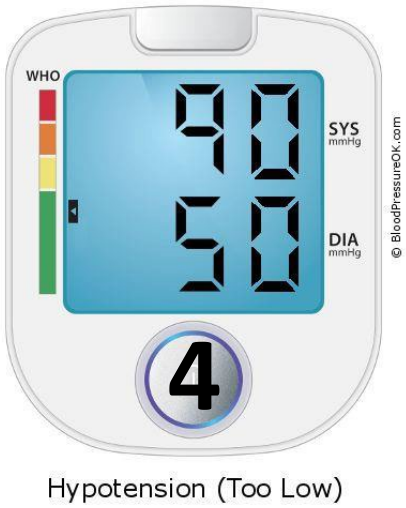
The color, the output

- when do you remove it?

When the patient starts mobilizing

4- the patient had hysterectomy, her blood pressure is as shown, pulses 110 bpm, what is the first differential diagnosis?

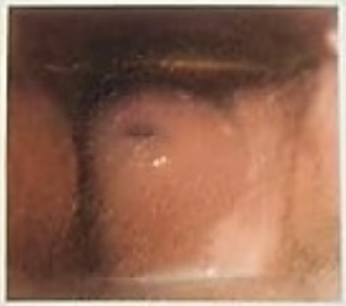
Surgical hematoma

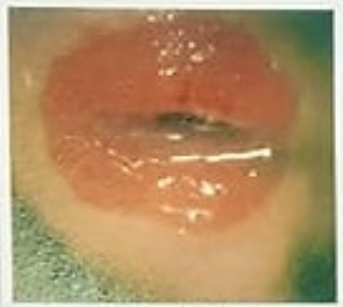


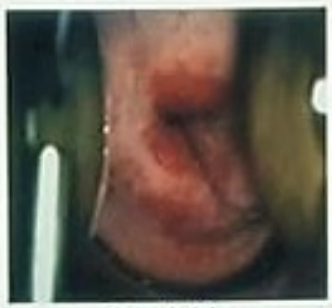
Hypotension (Too Low)

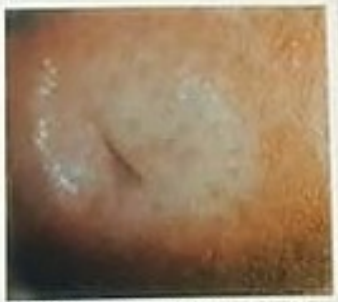

Other

Cervical Disorders Atlas

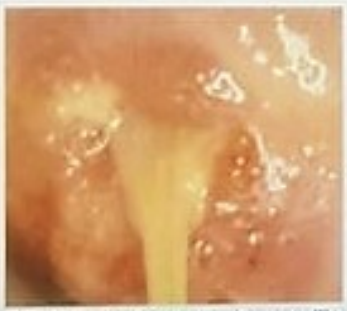

Healthy cervix

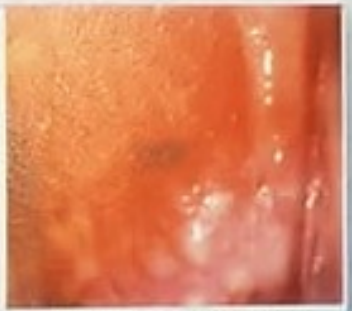

Ectropion[1]*

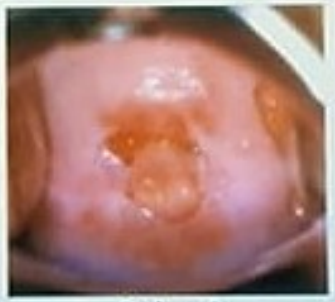

Cervicitis

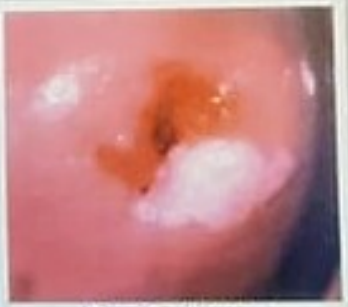

Trichomonas vaginalis

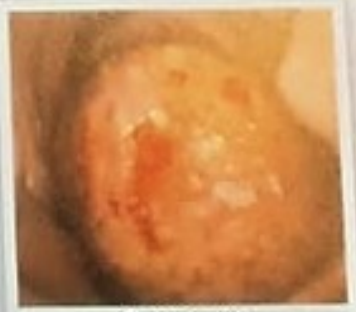

HSV

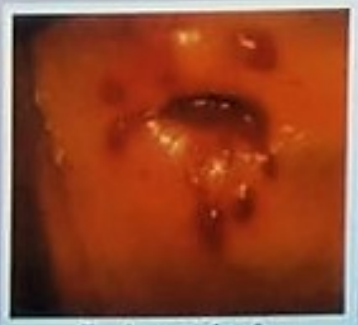

Mucopurulent discharge[2]*

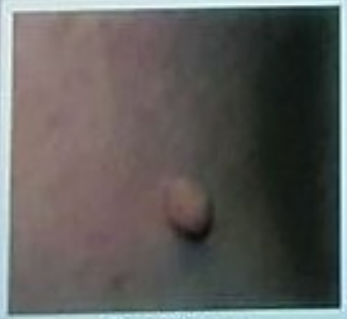

Nabothian follicle*

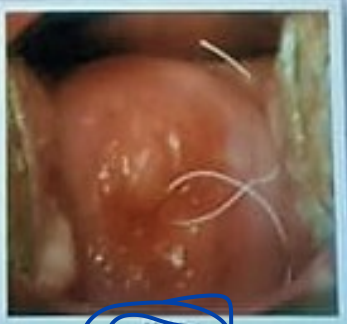

Polyps*

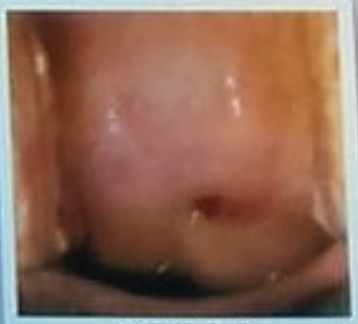

Cervical wart

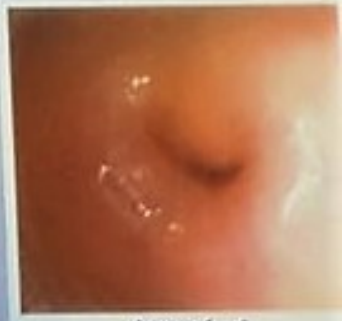

Cancer[1]*


Endometriosis


Papilloma


IUD*


Stenosis*


Atrophy*

Q: Patient Emma presents to the emergency department complaining of constant severe lower abdominal pain radiating to her right iliac fossa, her LMP was 28 days ago, she says that she has had an IUD inserted 10 days ago. (She had an appendectomy 2 years ago).

1. Mention four DDx?

- PID
- Ectopic pregnancy
- IUD caused perforation
- UTI
- Ovarian cyst
(rupture, hemorrhage, torsion)
- Pelvic abscess

2. Write the investigations that you would order (five)?

- Urine analysis and culture
- Pregnancy test
- Triple swabs for PID
- CBC, ESR, Urea and electrolytes
- US

3. Mention S/Sx that you might see?

- Fever, discharge, abdominal tenderness/rigidity, cervical motion tenderness, peritoneal signs, guarding, referred pain to the inner thigh down to the knee (coetaneous distribution of the obturator nerve)

Q: 28 y/o, G2 P1, at 12 weeks gestation she came for a routine visit, and her BG is (A-):

1. What lab test will you routinely order for this woman during her anti-natal care?

- CBC, Urine (analysis and culture), STD screen, Rh antibody screening

2. What are the indication for anti-D in this woman?

- Bleeding, Abortion, Amniocentesis | sensitising events

3. What would you give the mother after the 3rd trimester and after delivery?

- **3rd Trimester:** We give it
- **After Delivery:** We check if the baby is Rh+ we give it within 72 hours

4. What complication might result if you don't administer anti-D?

- Hemolytic disease of newborn or hydrops fetalis (in the next pregnancy)

Q: A patient presented with vaginal discharge of 7 months duration and postcoital bleeding:

1. Name the lesion?

- Cervical Ectropion

2. What does the strawberry lesion on the cervix consist of?

- Columnar Epithelium

3. Mention 2 things you should ask the patient about?

1) Pap smear
2) smoking,
3) History of STDs

4. Mention the most common presentations of this lesion (3 points)?

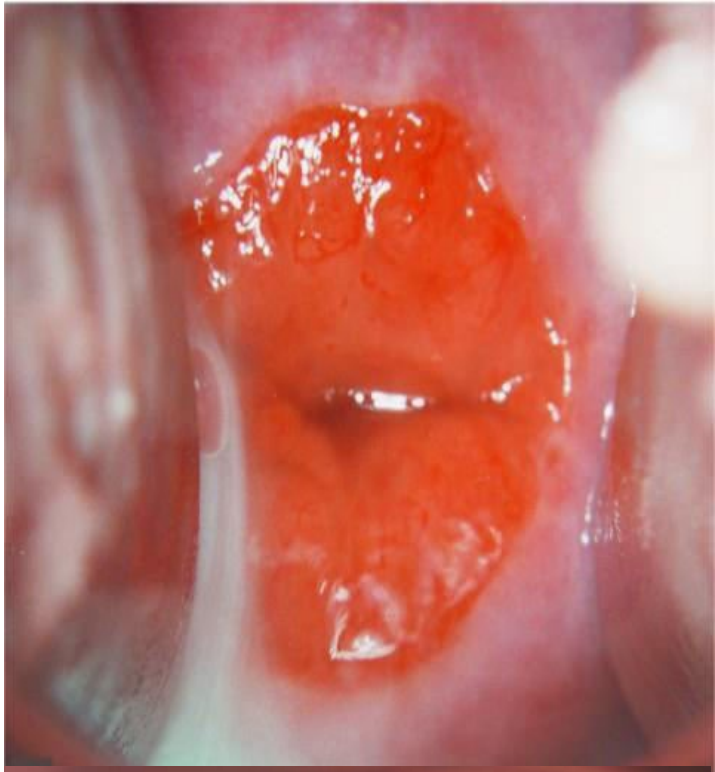
1) Vaginal discharge
2) Dyspareunia and post coital bleeding
3) Intermenstrual bleeding

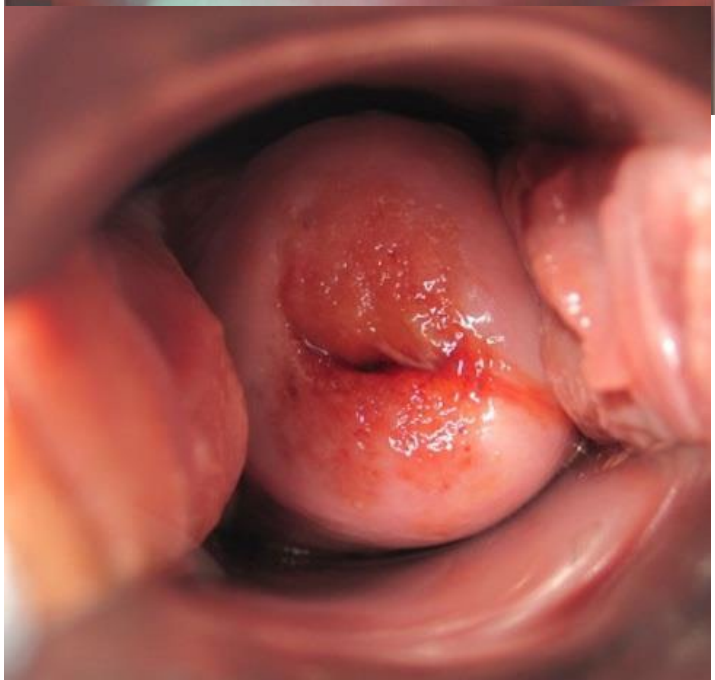
5. Name 5 relevant investigations?

1) Pap Smear
2) Con Biopsy
3) High vaginal swabs for gonorrhea
4) High vaginal swab for chlamydia

6. If all results were negative, what is the next step?

- Follow up on pap smear





Q: Nadia, a 25 years old G1P1 came to the clinic came to the clinic complaining of galactorrhea and oligomenorrhea

1. What is the condition?

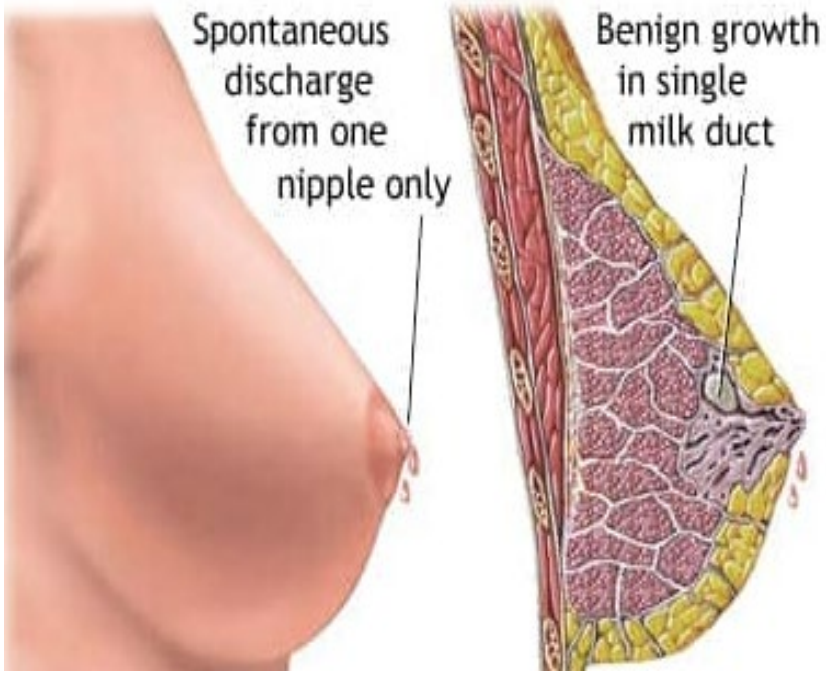
- Galactorrhea

2. What is your first investigation?

Prolactin level

3. Name a test to confirm it?

Microscopy to visualize fat droplets



4. Write other 2 investigation you want to order?

Brain CT, FSH, LH , TSH, BHCG Microscopy to visualize fat droplets

5. Mention 3 drugs that can cause it?

- Antidepressants (TCAs), Anti psychotics, OCPs, Anti hypertensives, Dopamine antagonists

6. Write 2 drugs for the treatment ?

Bromocriptine (dopamine agonist), Cabergoline

7. If this pt. doesn't want to be pregnant, is she still in need for treatment and why?

Yes, this condition could be caused by a prolactinoma which needs Mx

8. When do you do surgical Mx?

When medical therapy (for 3 months) has failed to stop galactorrhea and the cause is a prolactinoma or if the tumor is compressing other structures

→ surgery: transsphenoidal microsurgical resection


Best of Luck!
دعواتكم