OBG-PEDIATRICS

EXTRA-EDGE

OBG

1. Arrange the following branches of the uterine artery in the correct sequence as they proceed towards the endometrium:

menses

A. Uterine artery → Arcuate artery → Radial artery → Basilar artery → Spiral artery

B. Uterine artery → Radial artery → Arcuate artery → Basilar artery → Spiral artery

C. Uterine artery → Arcuate artery → Basilar artery → Radial artery → Spiral artery

D. Uterine artery → Basilar artery → Arcuate artery → Radial artery → Spiral artery

V Are Best !

24. Preclampsia is due to decreased activity of which of the following?

A. Endothelin
B. Human chorionic gonadotropin
C. Thromboxane A2
D. Vascular endothelial growth factor

Pathophysiology: Failure of invasion of spiral artery by extra-villious cytotrophoblasts

TxA2: PGI2: ↑

Increase (Vasoconstrictors) -
soluble fms-like tyrosine kinase (sFlt-1)
Endoglin
TNF-A
Cytokines
Thromboxane A2
Lipid peroxidase

Decrease (vasodilators)
VEGF
Placental growth factor
Prostacyclin I2
NO

Uteroplacental insufficiency

IUGR

early-onset preclampsia

≤ 34 wks

Uterine A doppler - notching

6. A 31-year-old woman, gravida 3 para 2, at 28 weeks gestation comes to the OPD for a prenatal visit. She has chronic hypertension that has been well controlled during this pregnancy. At the patient's previous prenatal visits, her blood pressure ranged from 120/70 to 130/80 mmHg. Today, her blood pressure is 150/100 mmHg and repeat is 152/98 mm Hg. Fundal height is 24 cm. Urinalysis shows 2+ protein. A transabdominal ultrasound reveals oligohydramnios and a fetus with growth restriction. Compared to normal placental parameters, this patient most likely has which of the following hemodynamic changes?

A. A

B. B

C. C

D. D

	Placental vascular resistance	Uteroplacental perfusion	Umbilical vein oxygen delivery
A	↓	↓	↑
B	↓	↑	↑
C	No change	↓	↑
D	↑	↓	↓

23. Ms. T visits the OPD for a routine check. She has a Copper containing IUD inserted 6 months back and is concerned as she cannot feel the thread. Her LMP was 2 weeks back. On speculum examination you see the picture below. Which of the following is the most appropriate next step?

A. Obtain a trans vaginal ultrasound
B. Obtain a KUB radiograph
C. Attempt IUD removal by means of an IUD hook or long artery forceps
D. Continue the exam by twirling a cytologic brush in her endocervical canal

CuT + UPT positive

1.If the patient does not wish to continue the pregnancy: MTP + Remove CuT

2.If the patient wishes to continue the pregnancy:

1. **If thread is visible:** Remove CuT
2. **If thread is not visible:** Counsel → Continue ± CuT → infn / preterm labour / abortn
   → Remove → Shirodkar's hook

Case of Missed Threads

1.Step 1: TVS

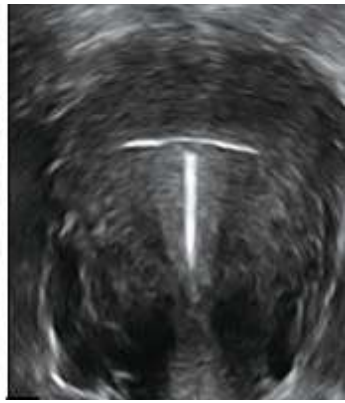
2.If IUCD not visible → Xray

In UTERUS:

IIf patient wants to continue: If Continue

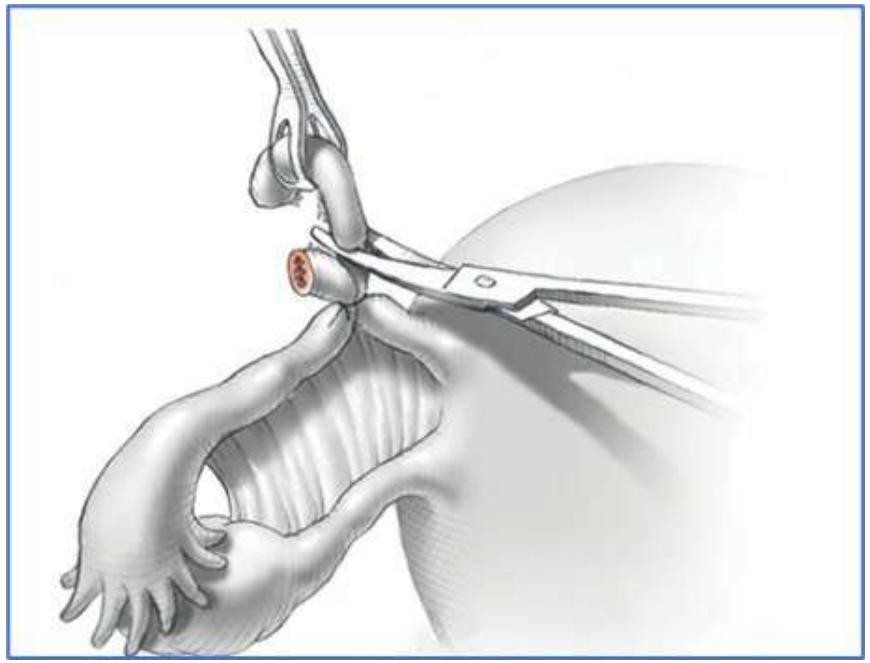
patient wants removal: Hysteroscopic removal

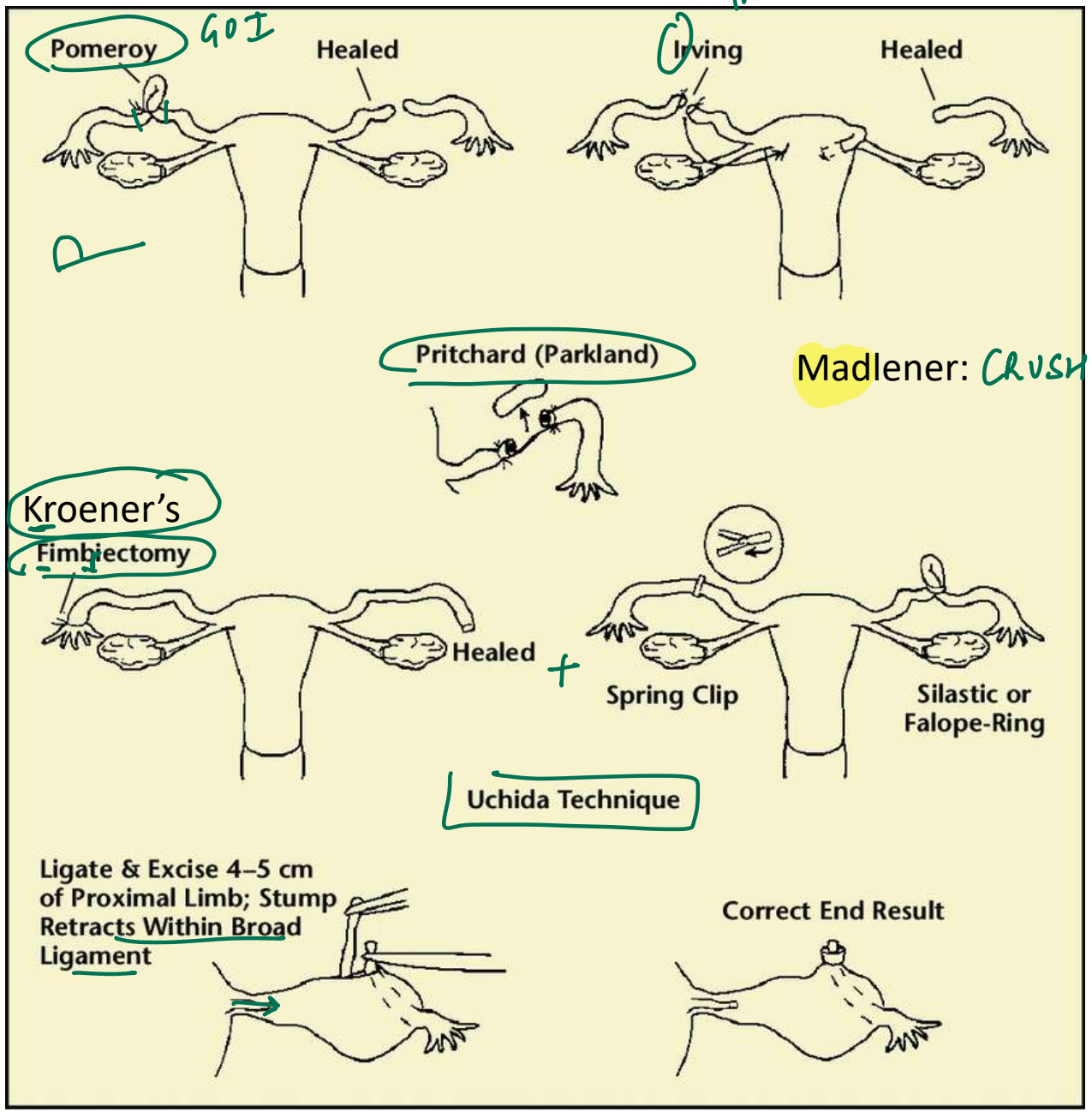
If perforation is detected: Laparoscopic removal



12. Identify the procedure shown

A. Pomeroy's technique
B. Salpingectomy
C. Tubal recanalization
D. Parkland procedure





10. A 34-year-old P2L2 is taking "Chhaya" for contraception. She has been taking it for 9 months. She reports to you that she has missed taking the pill for the last 2 weeks as she had been traveling and forgot to carry the pill with her. How many tablets has she missed?

A. 1

B. 2

C. 7

D. 14

- CDRI
- Tranan cycts
CI - PLOD.

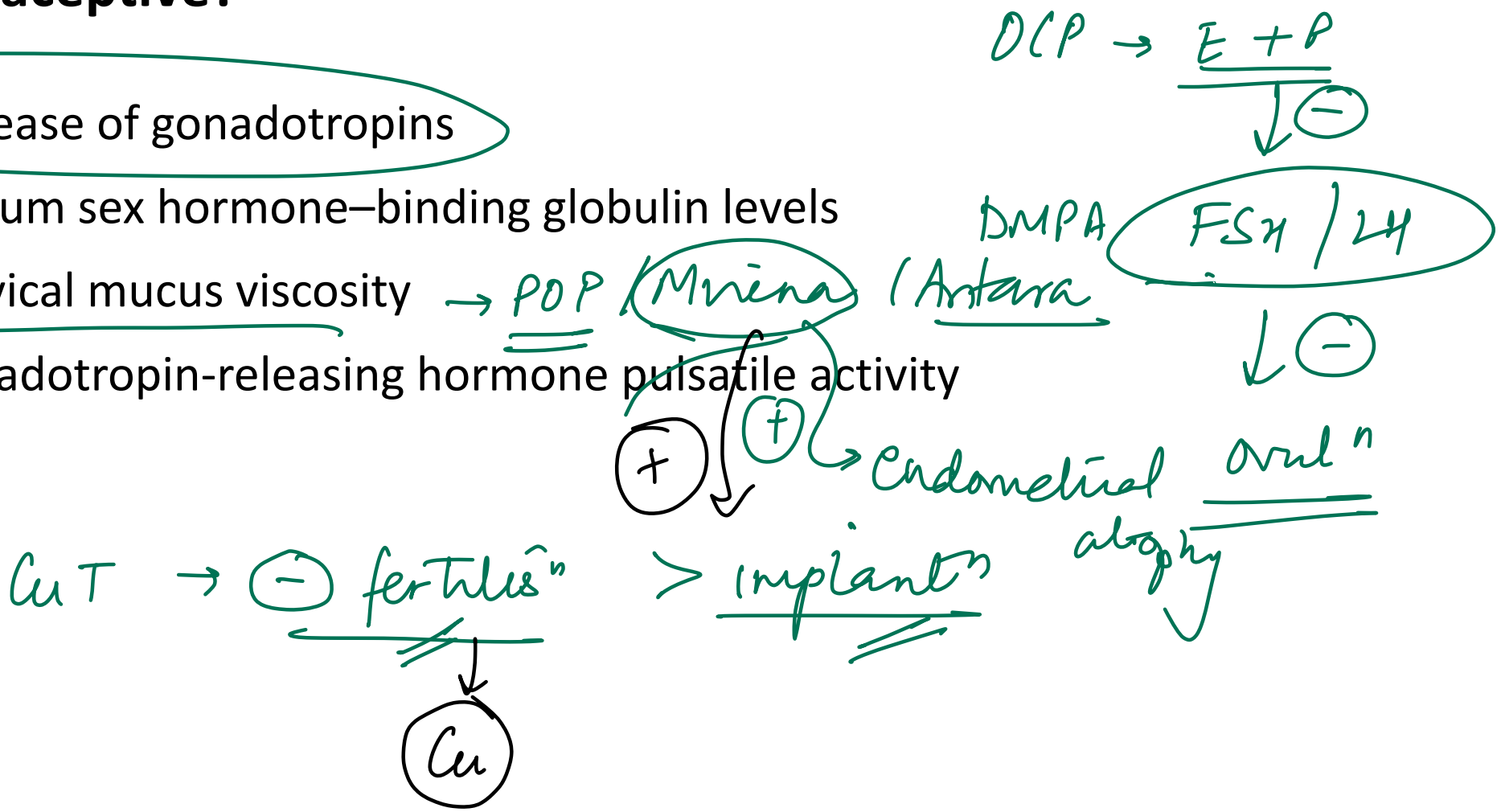
11. Which of the following is the primary mechanism of a combined hormonal contraceptive?

A. Decreased release of gonadotropins

B. Decreased serum sex hormone–binding globulin levels

C. Increased cervical mucus viscosity

D. Increased gonadotropin-releasing hormone pulsatile activity



39. Which of the following is not considered an advantage of using norgestimate-containing oral contraceptives?

A. Reduces acne and hirsutism

B. Reduces venous thrombosis

C. Lower cardiovascular risk

D. Fewer metabolic side effects

Generation	Estrogen	Progestogen
1st Generation	Ethinyl oestradiol	Norethindrone
2nd Generation	Ethinyl oestradiol	Norgestrel, LNG
3rd Generation	Ethinyl oestradiol	Desogestrel, Gestodene, Norgestimate
4th Generation (Yasmin)	Ethinyl oestradiol	Drospirenone

most potent.

anti-androgenic

↓

Hyperotenance.

36. What is the lifespan of this newly introduced contraceptive advice?

A. 1 y

B. 3 y

C. 5y

D. 7y

LARC

Method	Hormone/Type	Duration	Key Features
Copper IUD (Cu-T 380A)	Non-hormonal	10 years	Inhibits sperm motility & fertilization
LNG-IUD (Mirena, Skyla)	Levonorgestrel	5 years (Mirena) 3 years (Skyla)	Thickens cervical mucus, suppresses endometrium
Implanon/Nexplanon Single rod, radiopaque	Etonogestrel	3 years	Inhibits ovulation
Norplant (older) 6 rods, discontinued	Levonorgestrel	5 years	Inhibits ovulation
Depo-Provera (DMPA injection)	Medroxyprogesterone acetate	3 months	Inhibits ovulation, thickens mucus weight gain, ↓ bone density

8. A group of premenopausal women participate in a clinical trial for a medication injected as depot intramuscular injection used to treat endometriosis. Prior to initiation of the medication, all the women had normal premenopausal levels of gonadotropin-releasing hormone (GnRH), FSH, and estrogen. The participants' hormone levels are recorded over the next two months, with the results shown below:
The observed hormone levels are most consistent with administration of which of the following medications?

Day	GnRH	FSH	Estrogen
3	Normal	High	High
60	Low	Low	Low

A. Clomiphene citrate
B. Danazol
C. Letrozole
D. Leuprolide
E. Relix

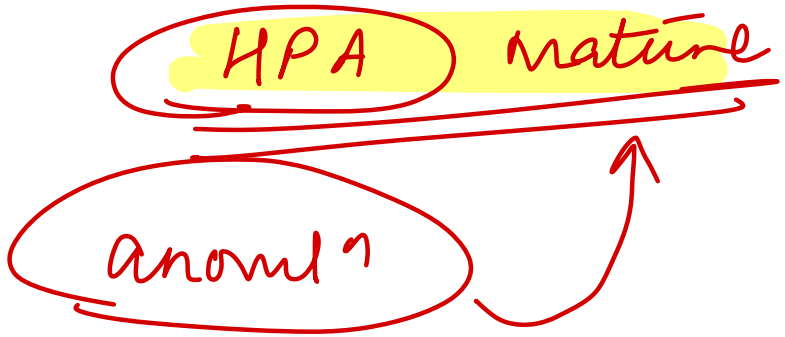
22. A 16-year-old girl comes to the OPD for evaluation of painful menstrual periods. The patient underwent menarche at age 13 and initially had irregular menses. Her menstrual cycles now occur every 30 days, with 4 days of moderate bleeding. Her menses have become increasingly painful; lower abdominal pain starts a few hours prior to menses and lasts 1 or 2 days with associated fatigue, dizziness, and diarrhea. She misses school at least 1 day per month due to the pain but is able to maintain her grades and has no pain or other symptoms after completion of menses. The patient has a history of depression, for which she sees a therapist, but has had no recent changes in mood. Her last menstrual period was a week ago. Vital signs are normal. Pelvic examination shows normal external genitalia and a clear discharge emerging from the cervical os. On bimanual examination, the uterus is mobile, nontender, and normal in size and contour. Which of the following is the most likely diagnosis in this patient?

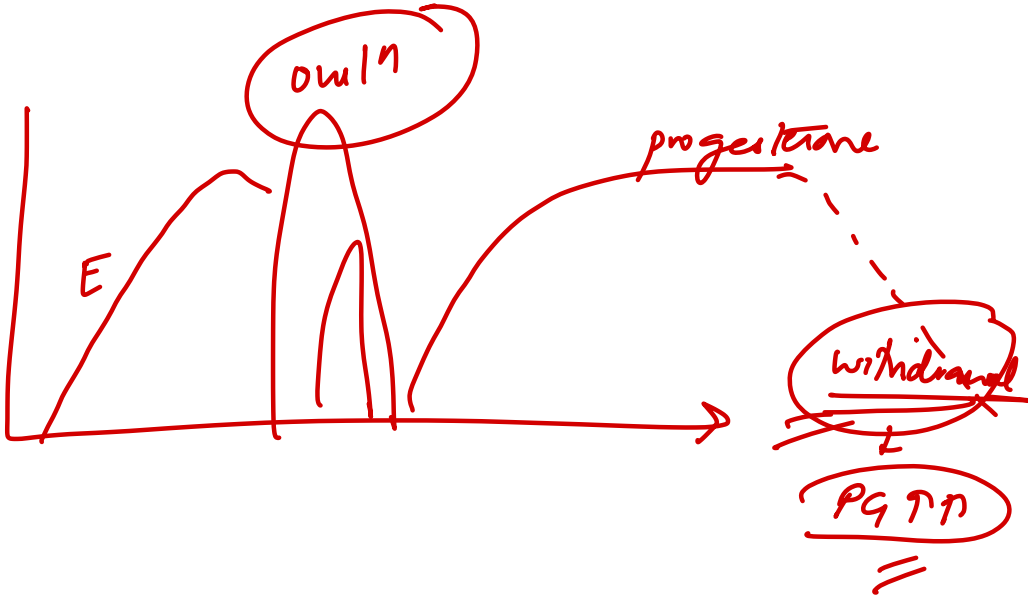
A. Adenomyosis

B. Endometriosis

C. Primary dysmenorrhea

D. Somatic symptom disorder





Normal: 24-38d
Cycle: 4.5-8d
Volume: 20-80ml

Primary dysmenorrhea:
Since menarche
Generalised suprapubic
Just before or at menstruation
Relieved in 72hrs
Normal examination

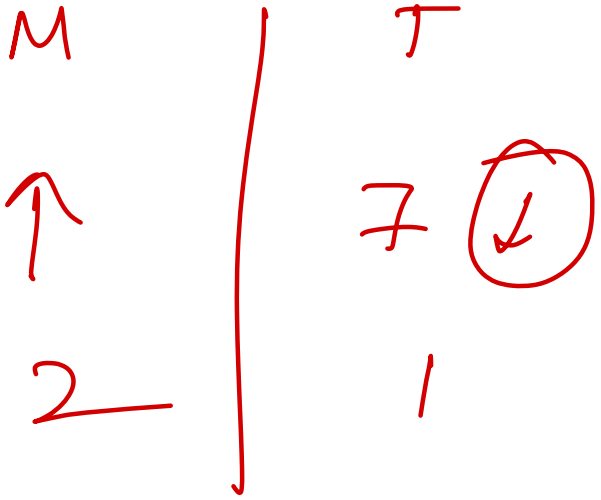
20. A newborn is being evaluated in the nursery. The patient was born at term via spontaneous vaginal delivery to a 23-year-old woman. The mother developed dark terminal facial hair and a deepened voice during the pregnancy. The delivery was unremarkable, and the patient's vital signs are within normal limits. Examination shows ambiguous genitalia and clitoromegaly. Laboratory studies reveal elevated serum levels of testosterone and androstenedione. Karyotype testing shows a 46,XX genotype. Ultrasound of the pelvis shows a normal-sized uterus. This infant's presentation is most likely due to deficiency of which of the following enzymes?

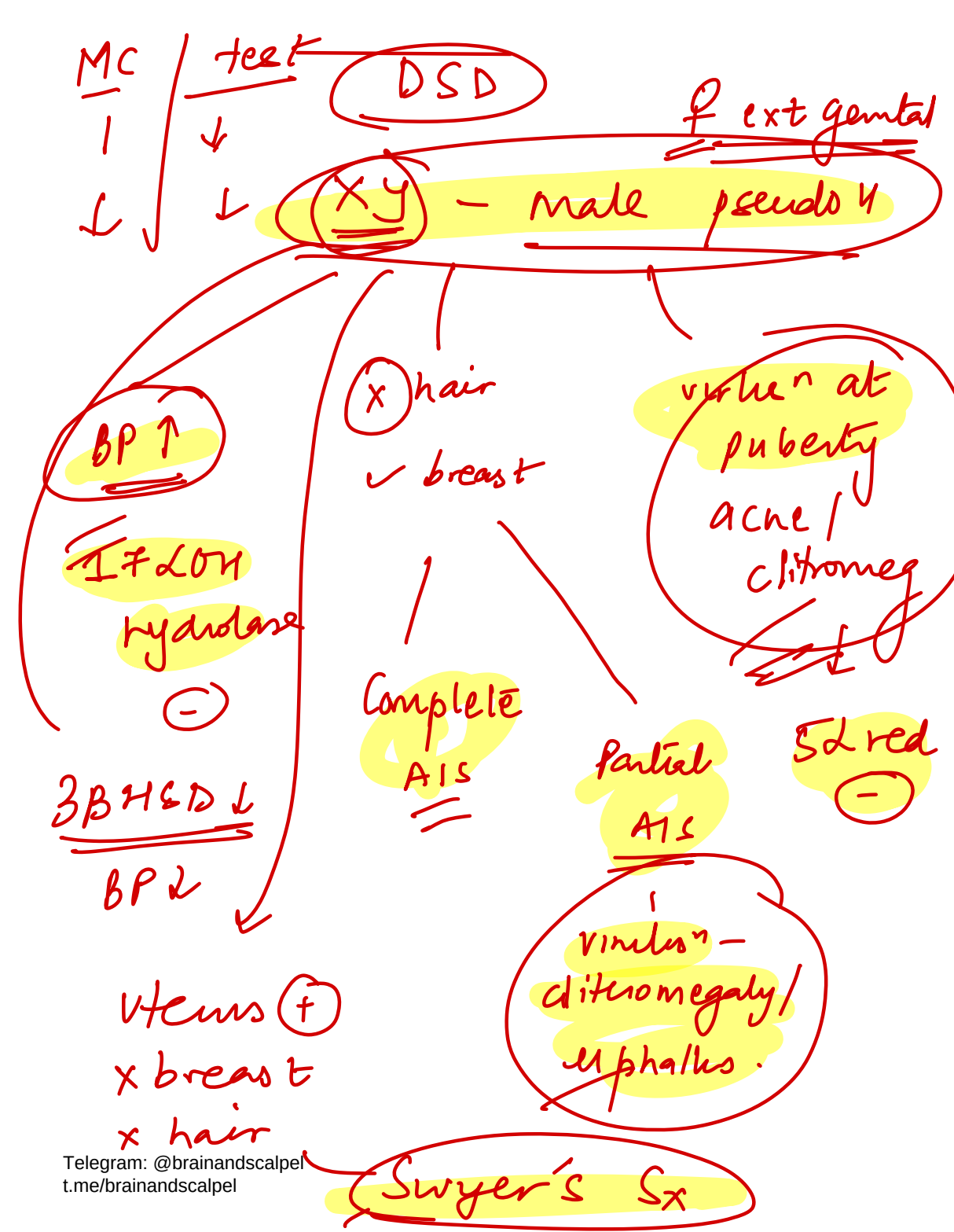
A. 5-Alpha reductase

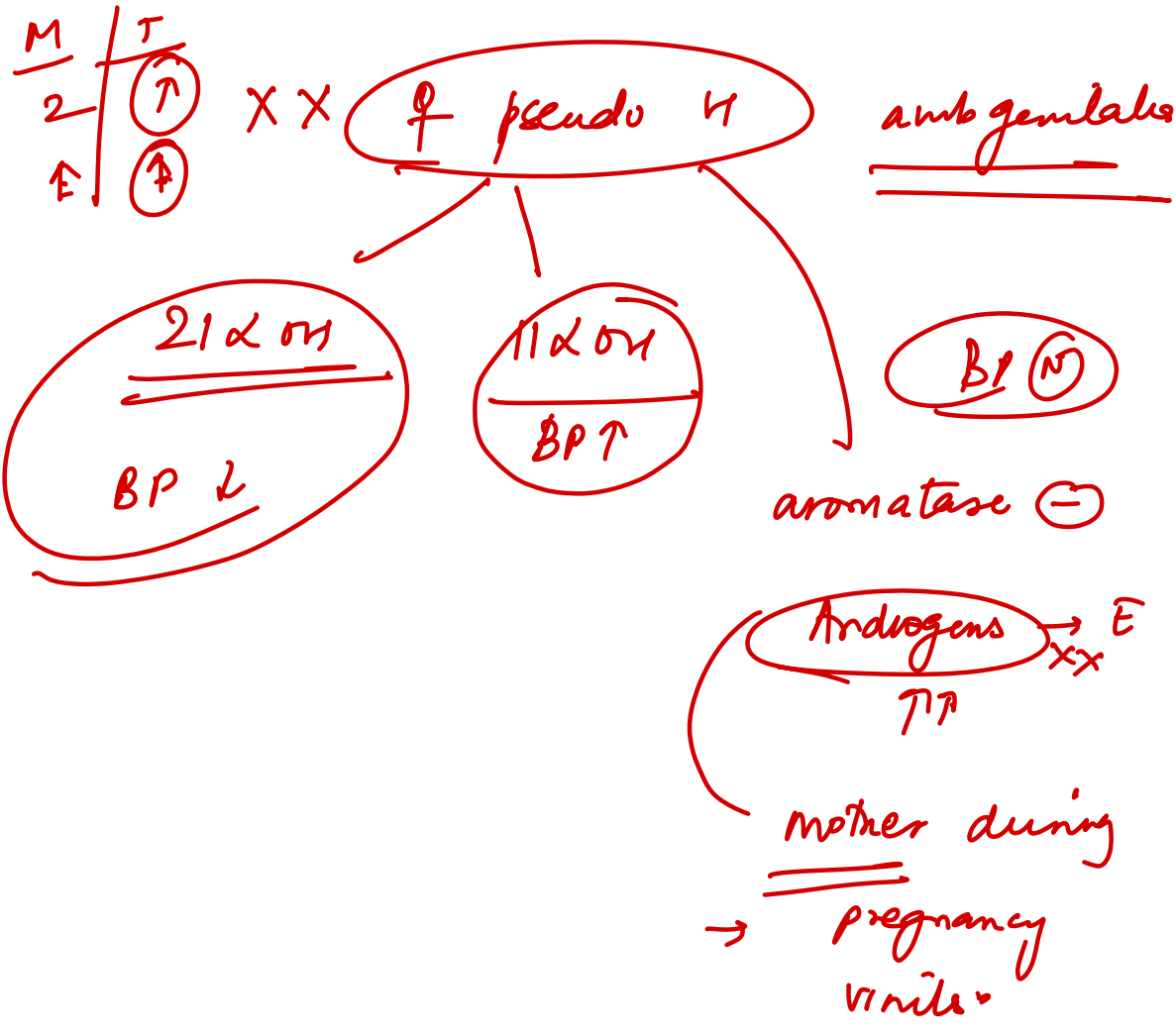
B. 17-Alpha hydroxylase

C. 21-Hydroxylase

D. Aromatase







30. Which of the following statements regarding Rubella infection is incorrect?

A. Infection in early pregnancy causes a milder form in the fetus
B. Fetus infected in late pregnancy may present with deafness only
C. It spreads via droplet infection
D. Classical congenital heart disease is VSD

TORCH — r/o transmission is more in third trimester except Rubella

Gregg's Δ

SNHL-MC finding
Cataract → Nuclear early > Lamellar/zonular.
MC eye C/F: salt-pepper retinop
PDA > PS
Expanded rubella: DM, renal diseases
Max transmission in in 1st trimester
Least r/o perinatal transmission

Varicella
13-20 wks Imax

19. A newborn boy is brought to the nursery for evaluation after delivery. The mother received no prenatal care but reports that the pregnancy was uncomplicated and she was healthy. The infant was born via spontaneous vaginal delivery and required no resuscitation. On examination, the infant is below the 3rd percentile for weight, 25th percentile for length, and 50th percentile for head circumference. Hepatosplenomegaly is present on examination. Over the next 48 hours, the infant develops jaundice, clear rhinorrhea, and a maculopapular rash on the feet and buttocks that later desquamates. Which of the following congenital infections is most likely in this patient?

A. Cytomegalovirus

B. HIV

C. Rubella

D. Syphilis

IOC Cong Syphilis → VDRL

Early Congenital Syphilis (≤2 years)	**Late Congenital Syphilis** (>2 years)
Failure to thrive, hepatosplenomegaly, Bullous rash on palms/soles (pemphigus syphiliticus), maculopapular rash, snuffles, lymphadenopathy ↳ rhinorrhea → ↑↑ bact. load.	Hutchinson triad, Gummas, rhagades (perioral fissures) Incisor Ik SNHL Cogan's
Osteochondritis, periostitis, pseudoparalysis of Parrot	Saber shins, frontal bossing, Clutton's joints Saddle nose deformity
Anemia, thrombocytopenia, nephrotic syndrome	Intellectual disability, optic atrophy, Tabes dorsalis

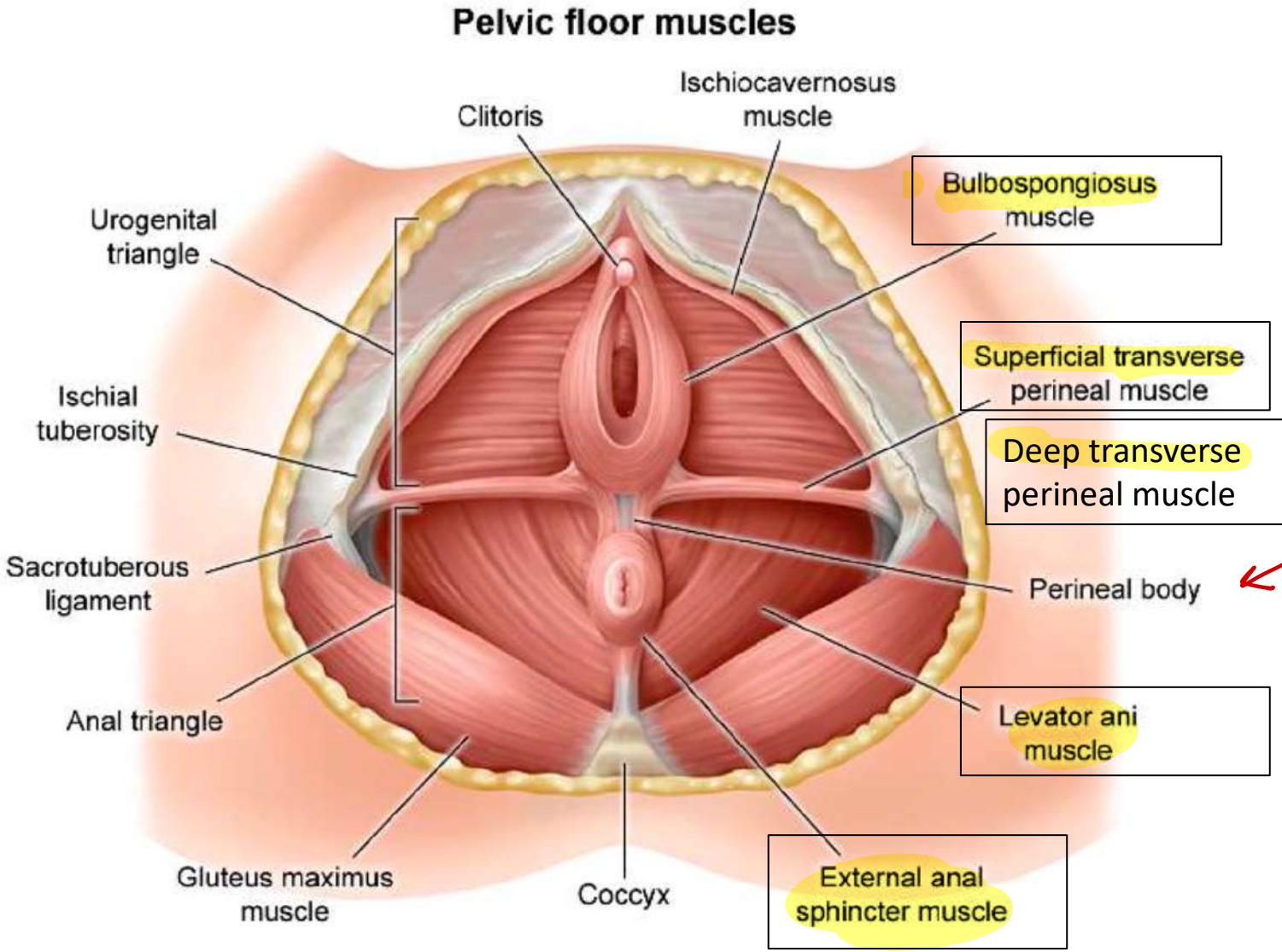
49. A 28-year-old woman, gravida 1 para 0, at 38 weeks gestation undergoes spontaneous vaginal delivery. After an uncomplicated delivery of the fetus and placenta, a maternal laceration is noted at the posterior vaginal opening through the vaginal mucosa and submucosa. Which of the following structures is most likely damaged in this patient?

A. Internal anal sphincter

B. Ischiocavernosus muscle

C. Levator ani muscle

D. Perineal body



muscles

pelvic D

Pubo + ilio + ischio

LA

urogenital diaphragm

17. According to DeLancey's classification of pelvic organ support, the uterosacral ligaments contribute to which level of pelvic support?

A. Level 2

B. Level 1

C. Level 3

D. Level 4

Table 2.2 Supports of the Genital Organs

Level I	Uterosacral ligaments and cardinal ligaments support the uterus and vaginal vault
Level II	Pelvic fascia and paracolpos which connect the vagina to the white line on the lateral pelvic wall through arcus tendinous
Level III	Levator ani muscles support the lower one-third of vagina

= transcervical = Mackenrodt's

× → Enterocele
Uterine prolapse
Vault

× → Cystocele / Rectocele

× → Urethrocele / defect perineum

3. A 27-year-old woman approaches the clinic for HPV testing for cervical cancer screening. The HPV is positive for type 18 HPV. What is the next best step?

16, 18

A. LLETZ

B. Acyclovir and review after 6 weeks for a repeat test

C. HPV vaccine

D. Colposcopy and biopsy

Pap + HPV

Cotesting

30yrs — 5yrs

Pap

- 21yrs - 3yrs

ACOG protocol *(Used by countries with limited resources)*

Pap – 3yrly – 21yr ——— 65yrs

Pap + HPV – 5yrly

WHO Screening *(Used by countries with limited resources)*

Start at age: 30 years

Stop at age: 50 years

See & Treat Approach:

HPV DNA testing → If positive → Rx: **LLETZ**

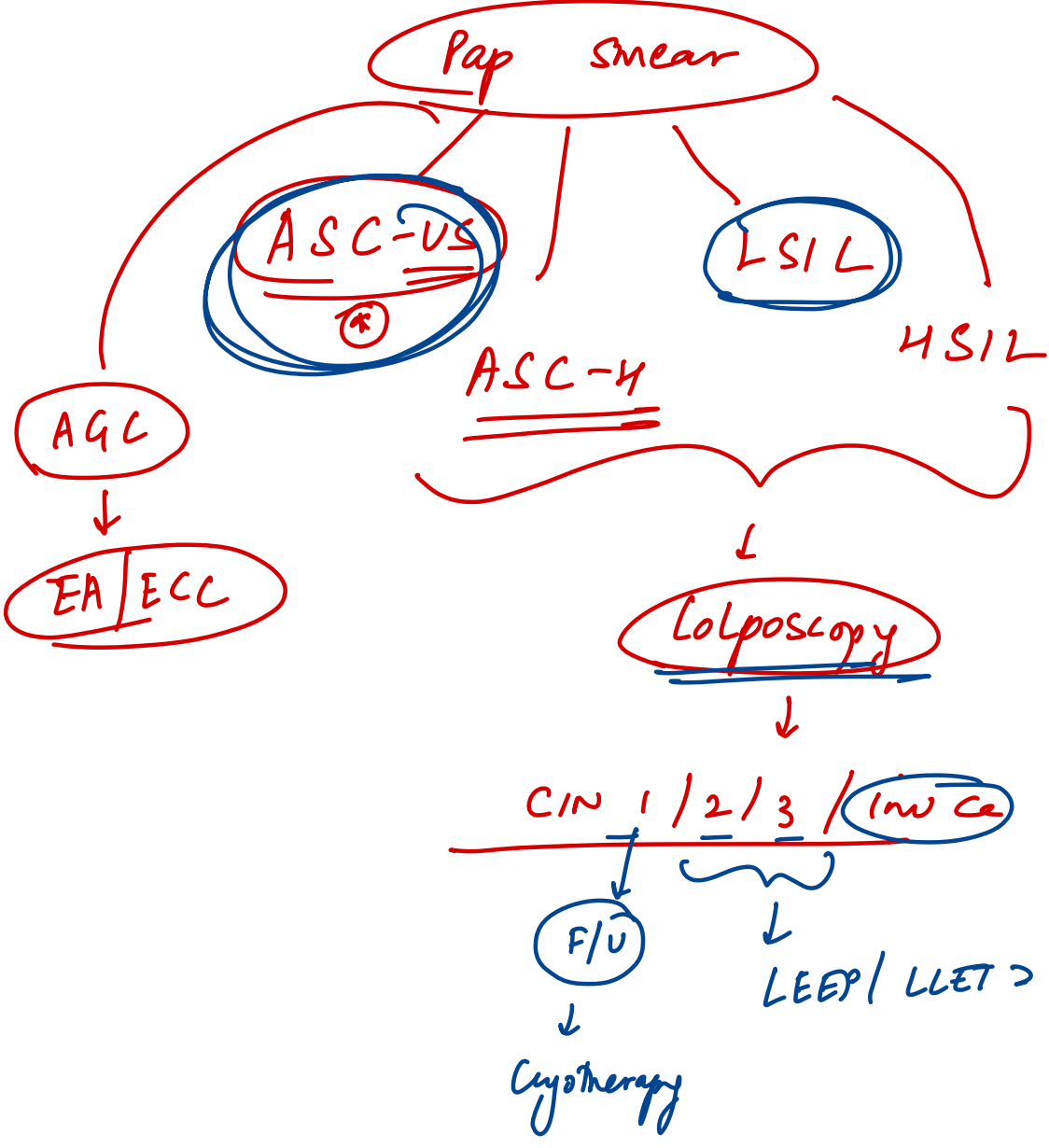
VIA test → If positive → Rx: **LLETZ**

abN → white

VILI — (N) vaginal — Lorange

See, Triage & Treat Approach *(Better)*:

HPV DNA → If positive → **VIA** → If positive → Rx: **LLETZ**



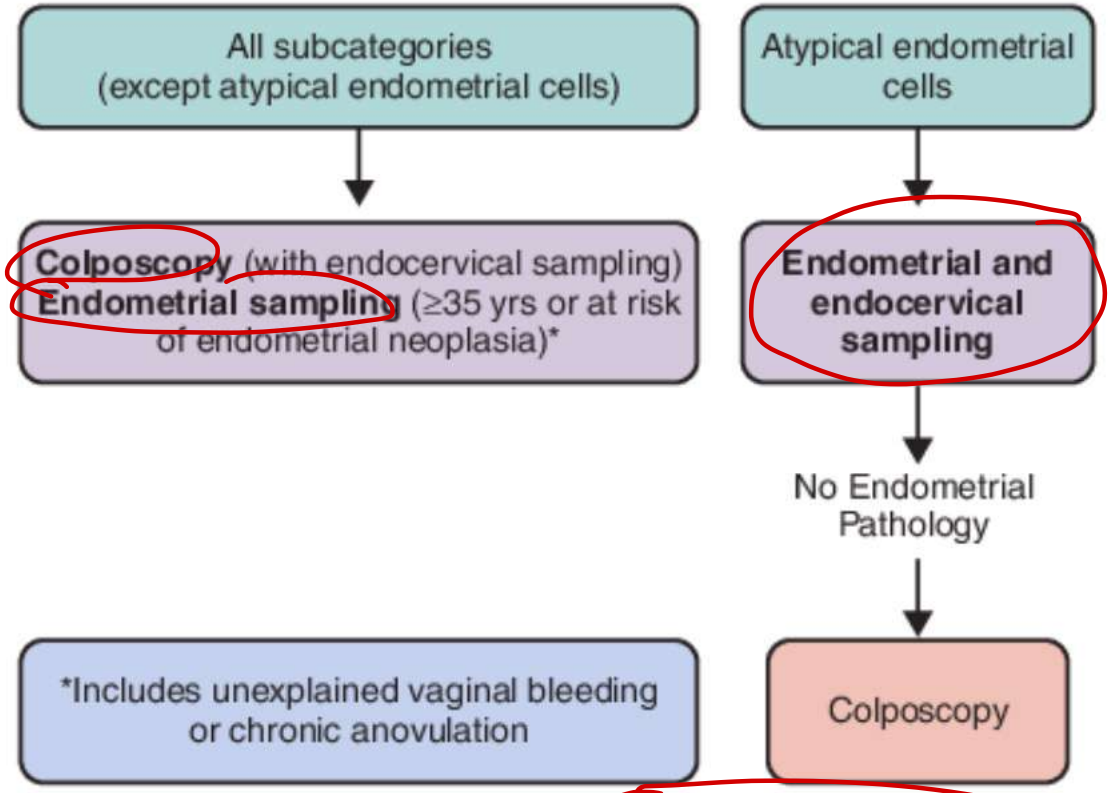


Figure 33.13A Women with Atypical Glandular Cells.

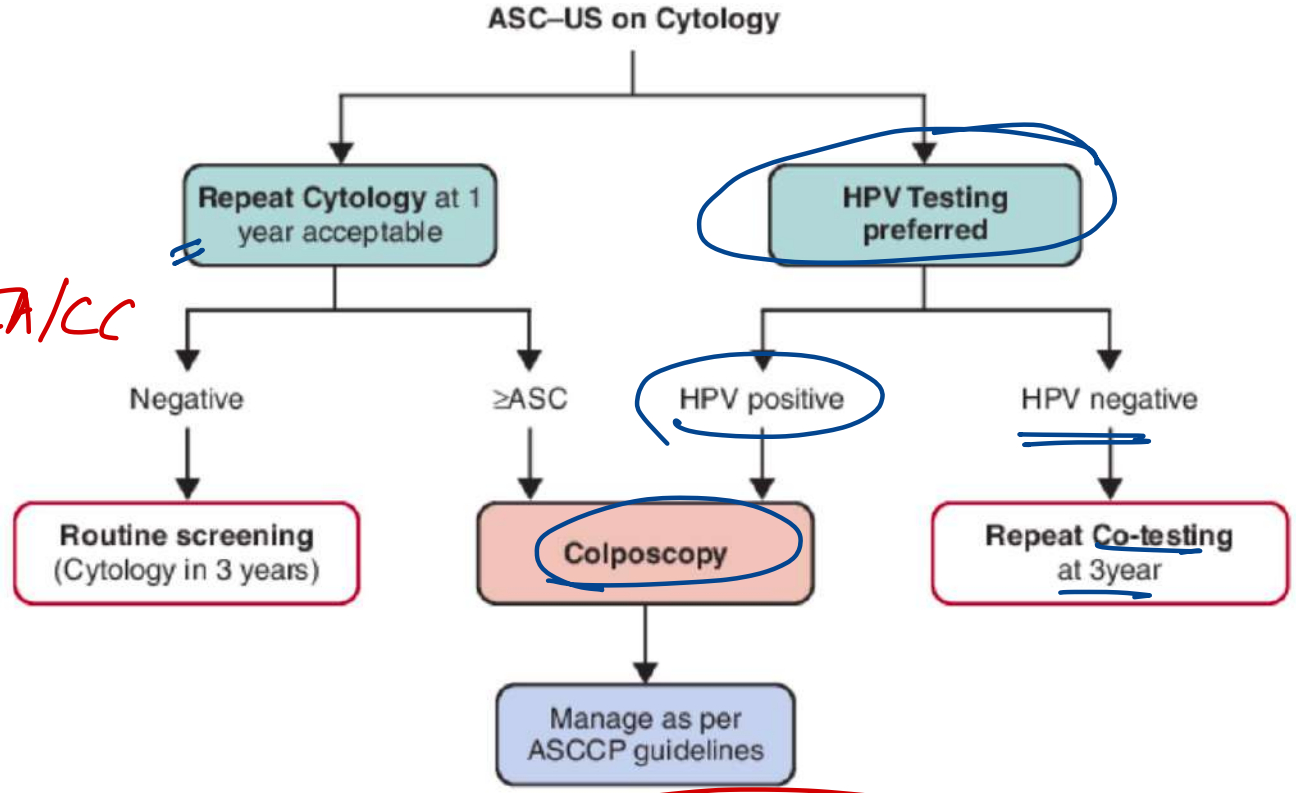


Figure 33.13C Atypical squamous cells-US.

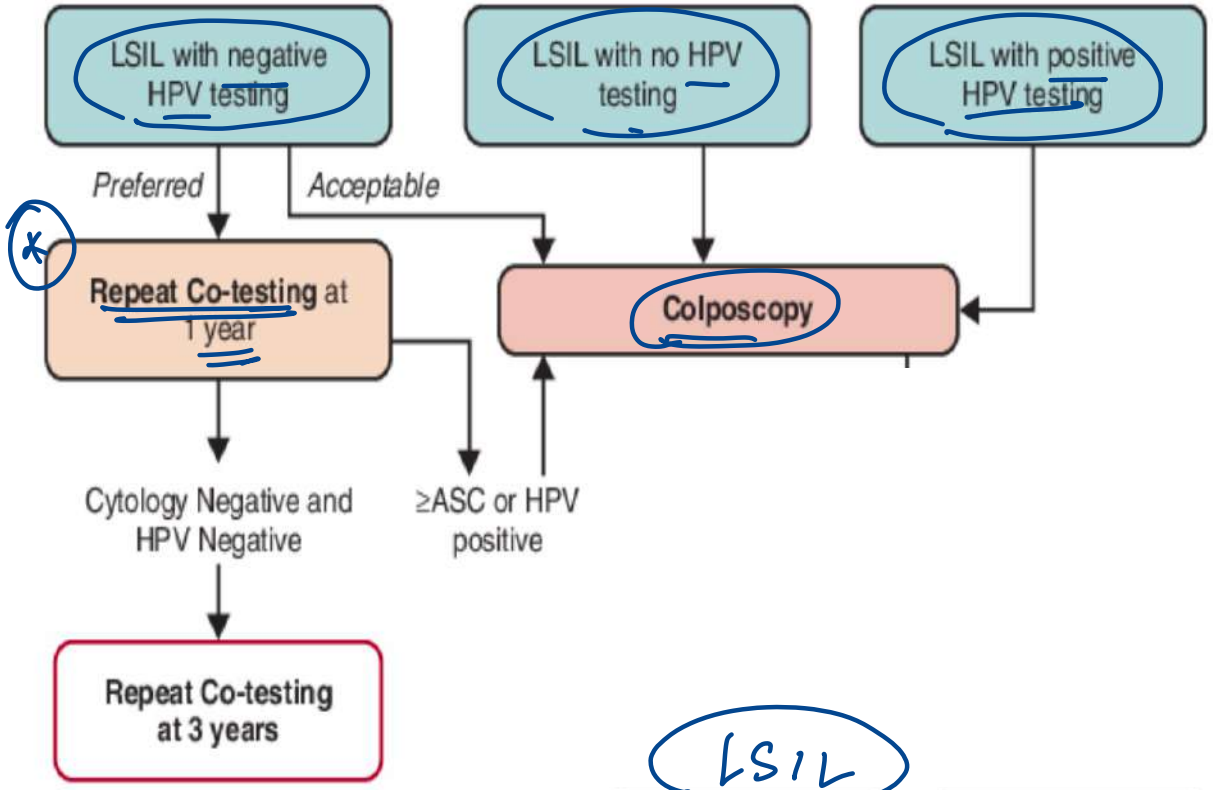
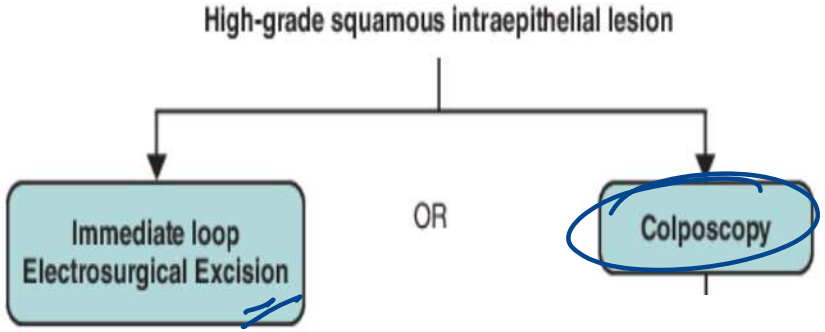


Figure 33.13E Low-grade squamous intraepithelial lesion.



- *CIN 2+ is found at colposcopy in 60% HSIL*
- *This justifies immediate excision for –*
  - *those who are at risk for loss to follow-up*
  - *who have completed childbearing*

Figure 33.13D High-grade squamous intraepithelial lesion.

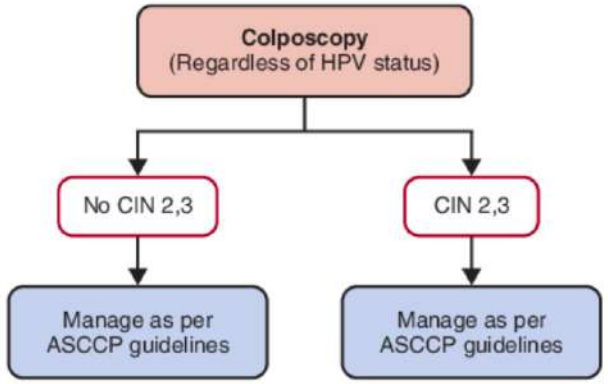
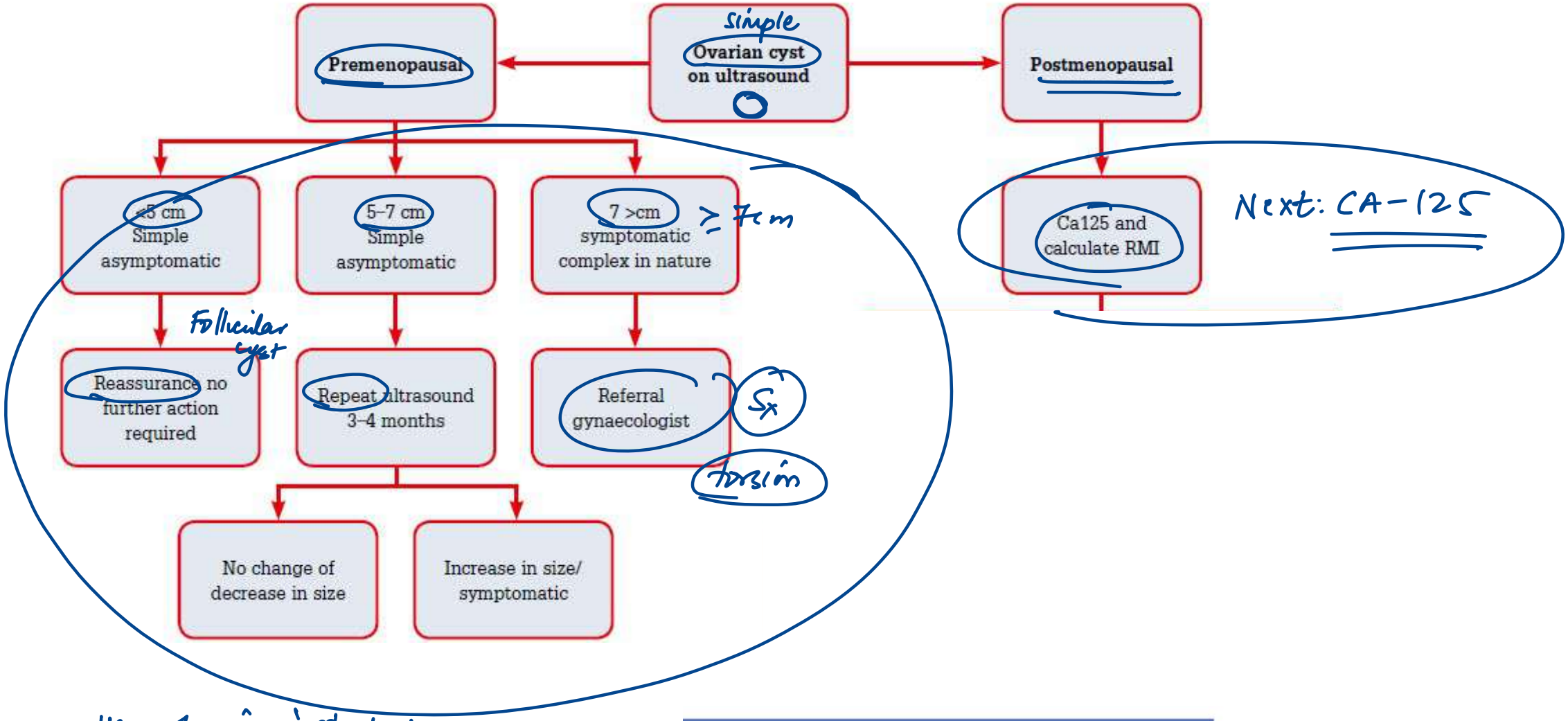


Figure 33.13B Atypical squamous cells-H.

34. Which of the following are components of RMI (risk malignancy index) used for carcinoma ovary? except

A. Ultrasound score
B. CA-125
C. Menopause status
D. Age



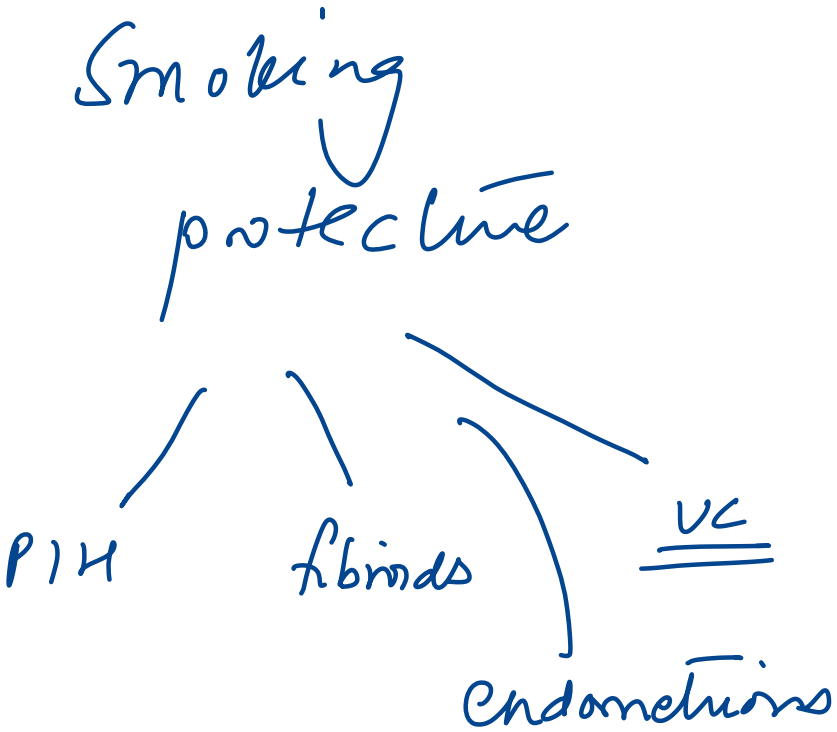
RMI = CA125 x U x M

- CA125 = serum level in IU/ml
- U= 0 (for ultrasound score 0)
- U= 1 (for ultrasound score 1)
- U= 3 (for ultrasound score 2-5)
- M=1 for premenopausal women
- M=3 for postmenopausal women

Ultrasound Score
- Multilocular cysts
- Solid areas
- Bilateral lesions
- Ascites
- Metastases

35. Which of the following statements is incorrect regarding Type I endometrial carcinoma?

A. It is associated with obesity and diabetes
B. Smoking is a high-risk factor
C. Endometrioid morphology is typical
D. Associated with p53 mutation



Type 1	Type 2
55–65 years	65–75 years
Unopposed estrogen, obesity, HTN, DM	Atrophy, thin physique
Endometrioid	Serous, clear cell, mixed Müllerian tumor
PTEN, ARID1A, PIK3CA, KRAS, MSI	TP53, PIK3CA
Indolent	Aggressive

27. A 30-year-old nulliparous woman comes to the OPD for evaluation of infertility. The patient has been attempting to conceive for the past 2 years. Menarche was at age 11, and her menstrual cycles occur 2-3 times per year and last 7-10 days. BMI is 35 kg/m². Physical examination shows mild acne and hair growth on the upper lip and chin. This patient is at greatest risk for which of the following complications?

A. Adrenal atrophy

B. Cushing syndrome

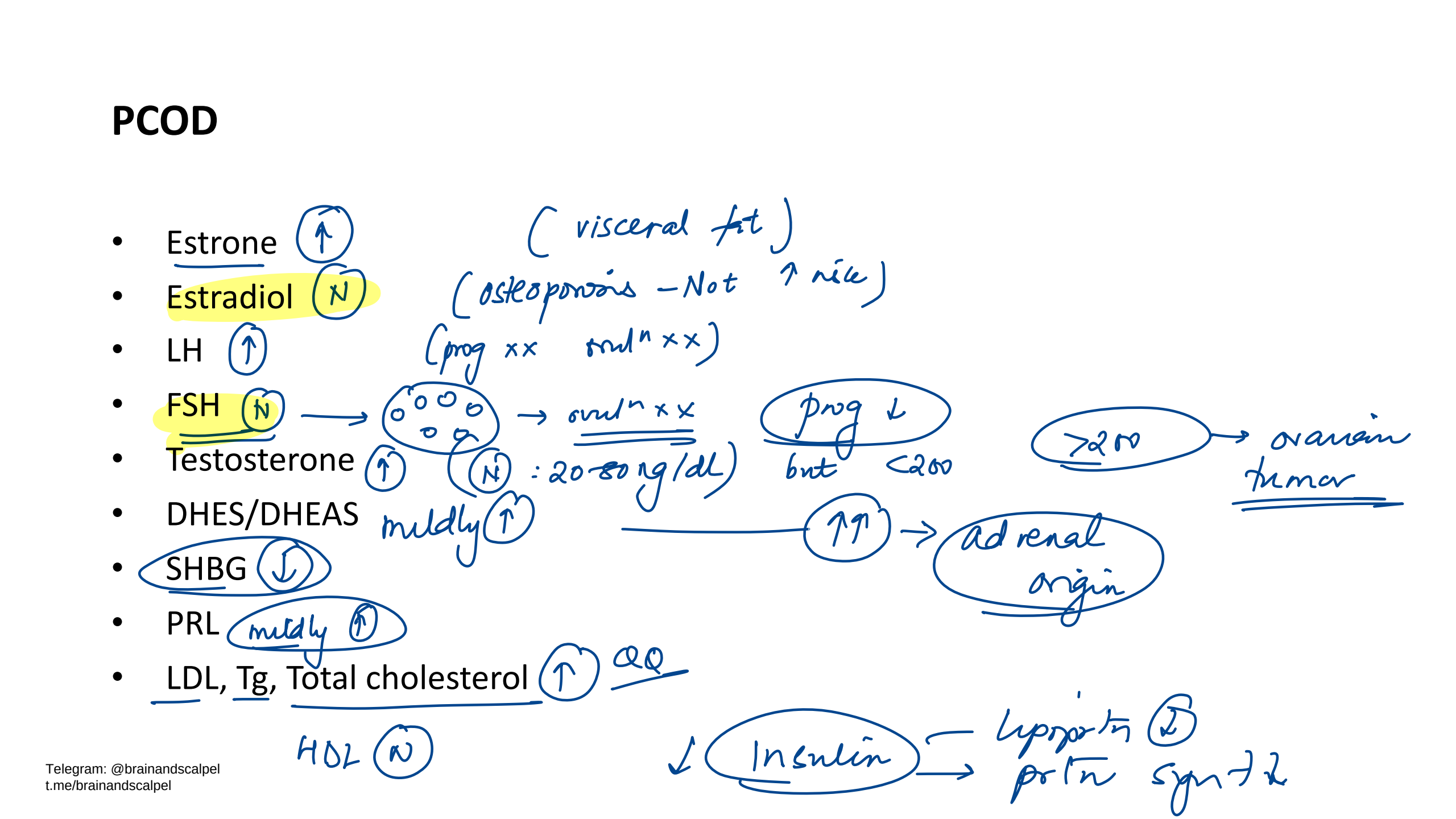
C. Ovarian carcinoma

D. Endometrial carcinoma

PCOD

PCOD

- Estrone ↑
- Estradiol N
- LH ↑
- FSH N
- Testosterone ↑
- DHES/DHEAS
- SHBG ↓
- PRL
- LDL, Tg, Total cholesterol ↑



18. A 33-year-old nulligravid woman comes to the OPD due to infertility. The patient also has a history of pelvic pain that worsens with menses. The pain has persisted despite medical therapy and is suspected to be due to endometriosis. Exploratory laparoscopy is performed, and multiple nodules, along with thin, filmy adhesions, are present throughout the pelvis. Several biopsies are obtained. In addition to having endometrial glands with hemosiderin pigment, one of the samples contains simple cuboidal epithelial cells. Which of the following is the most likely site of the biopsy?

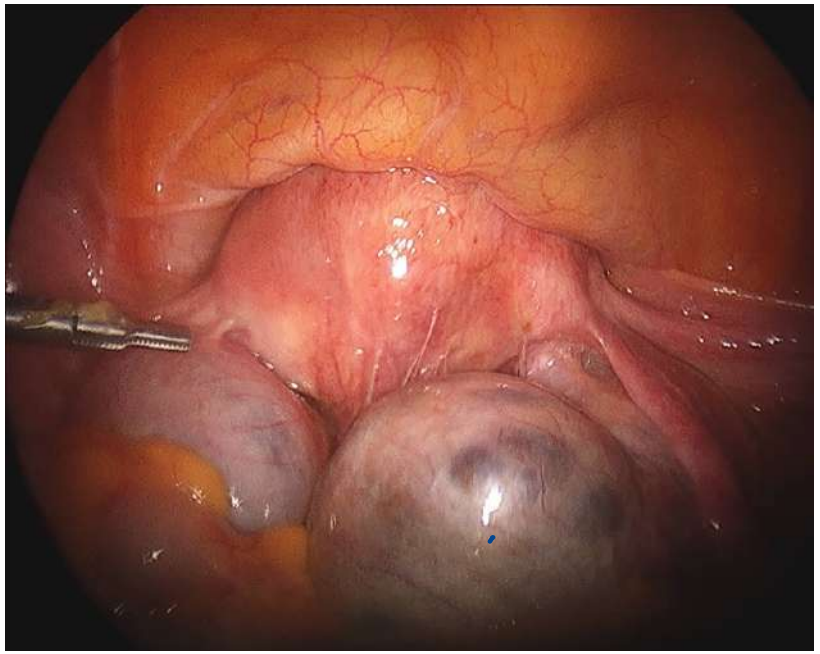
A. Cervix (endo)
B. Endometrium
C. Fallopian tube → ciliated columnar
D. Ovary

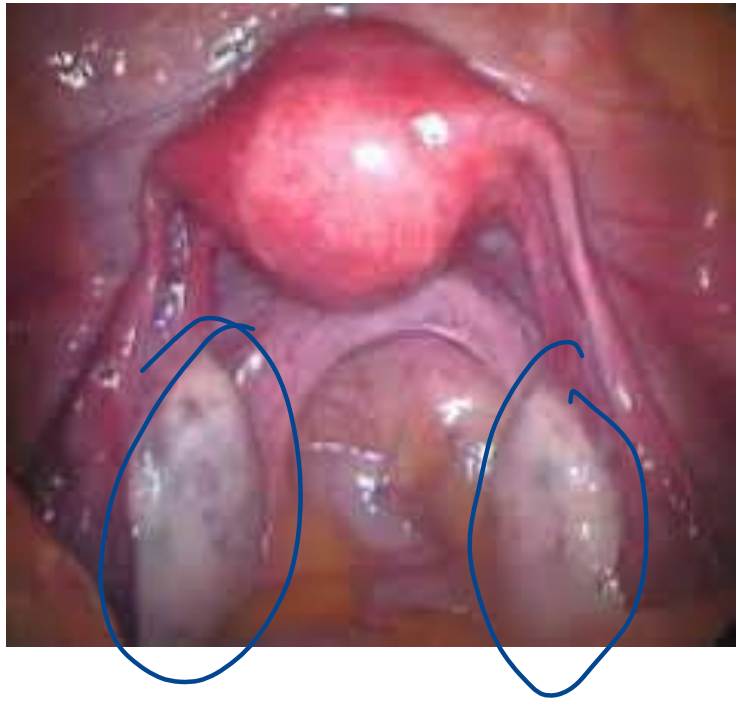
- simple columnar

ect to cx
vaginal
↓
str squamous

4. A 34y patient is undergoing laparoscopy for infertility. This image is noted. What is the likely diagnosis?

A. Adenomyosis
B. Endometriosis
C. PCOS
D. Salpingitis





PCOD

38. Arrange the following sites of endometriosis in decreasing order of frequency of involvement:

1. Pouch of Douglas
2. Uterosacral ligament
3. Broad ligament
4. Ovary
5. Fallopian tube

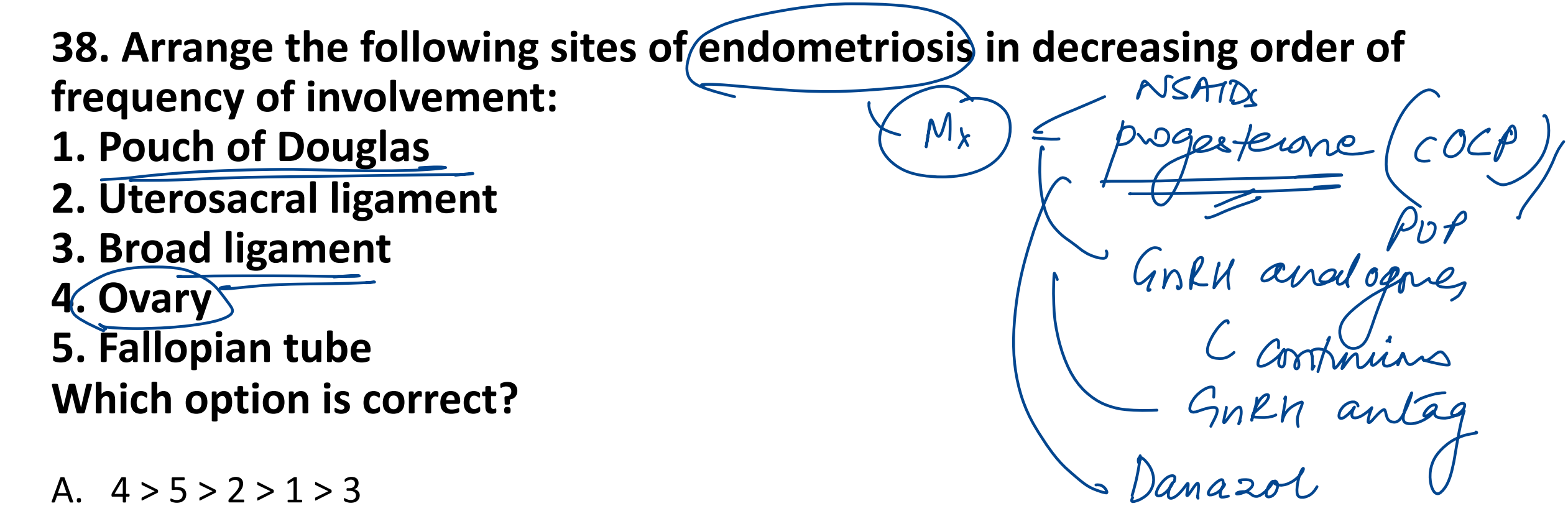
Which option is correct?

A. 4 > 5 > 2 > 1 > 3

B. 4 > 1 > 3 > 2 > 5

C. 4 > 5 > 1 > 3 > 2

D. 5 > 4 > 2 > 3 > 1



50. From which spinal segment is the sympathetic nerve supply to the ovary derived?

A. S2-S4

B. T9-T10

C. L4-L5

D. T10-T11

Organ	Spinal Segments
Perineum, vulva, lower vagina	S2–4 Pudendal
Upper vagina, cervix, lower uterine segment	S2–4 Pelvic parasympathetic
Uterine fundus, proximal fallopian tubes, broad ligament	T11–12, L1 Sympathetic via hypogastric plexus
Ovaries	T10–T11 Sympathetic via renal and aortic plexus
Outer two-thirds of fallopian tubes	T9–10 Sympathetic via aortic and superior mesenteric plexus

7. A 25-year-old G2A1 presents to the Antenatal OPD at 9 weeks. List the investigations that will be done:

a. Hb ✓ Blood group ✓ Rh-ve → Husband.

b. Urine CS /R/M ✓

c. TSH ✓

d. TORCH XX

e. FBS, HbA1c ✓

f. APLA XX — RPL ✓

g. Blood gp ✓

h. VDRL ✓ / HIV / HepB / HCV / Rubella IgG

+ve: Reassure

A. a, b, c, d, e, f, g, h

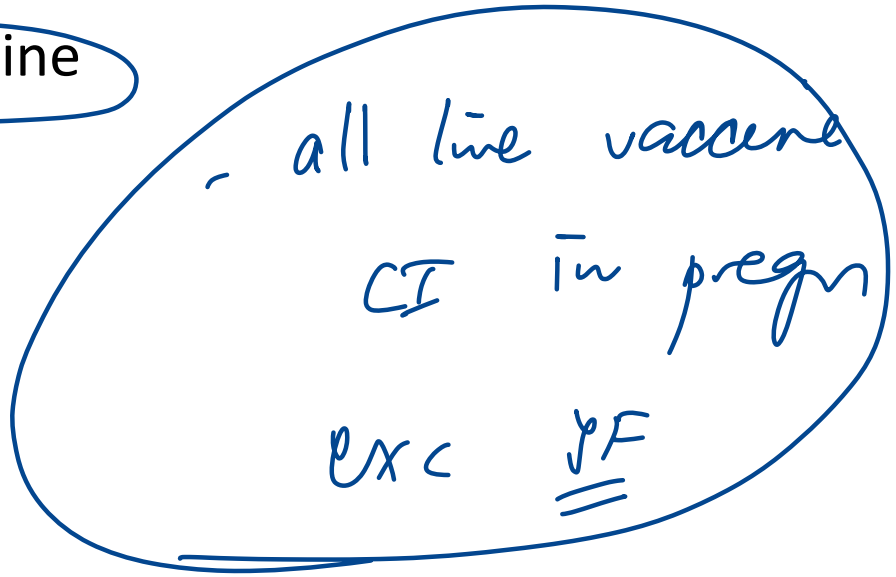
B. a, b, c, d, e, g, h

C. a, b, e, g, h

D. a, b, c, e, g, h

9. A 25-year-old primigravida presents to the OPD with a history of a dog bite. Her neighbor's pet dog has bit her on the leg. She is currently 10 weeks pregnant. What is the next best step?

A. Clean the wound, administer tetanus and rabies vaccine
B. Clean the wound, administer only tetanus vaccine
C. Clean the wound, administer antibiotics
D. Clean the wound, reassure her



48. During pregnancy, which of the following parameters increases?

A. Total oxygen-carrying capacity of blood
B. Serum iron concentration
C. Serum potassium
D. Serum ferritin

RBC vol ↑

PHYSIOLOGICAL CHANGES IN PREGNANCY

↑

Blood/plasma/RBC volume
Retic count
WBC count
All clotting factors
Fibrinogen
ESR, CRP
SHBG/TBG, Total protein
Transferrin, TIBC
LDL, HDL
Insulin

CO
HR, SV

IC TV MV

RBF, GFR

↓

Hematocrit
Hb
Platelet, eosinophils
F 11/13
Albumin
Protein C/S
Iron, ferritin
Serum Na, K, Ca, Mg

PVR
BP (DBP > SBP fall)

FRC
RV

Uric acid/Creatinine

Vaginal pH

Constant

BT, CT

EF

IRV
Vital capacity
TLC
COMPLIANCE

Category (BMI)	Total Weight Gain Range [kg]
Underweight (<18.5)	12.5–18 kg
Normal weight (BMI 18.5–24.9)	11.5–16 kg
Overweight (BMI 25–29.9)	7–11.5 kg
Obese (BMI ≥30)	5–9.1 kg

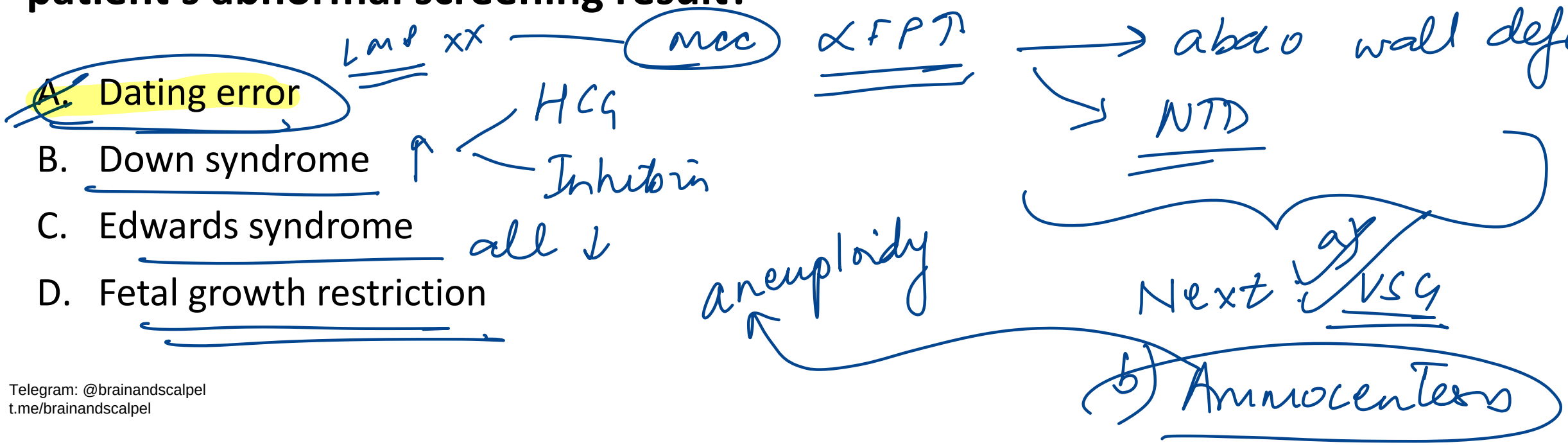
25. A 35-year-old woman, gravida 1 para 0, comes to the OPD for an initial prenatal visit. The patient has had no vaginal bleeding or abdominal pain and has not yet felt fetal movement. The patient's estimated gestational age based on her last menstrual period is 16 weeks. She has type 1 diabetes mellitus that is controlled with insulin. She smokes a pack of cigarettes daily. As part of her prenatal laboratory screening, a second-trimester maternal serum quadruple screen is performed and reveals an elevated alpha-fetoprotein level. Which of the following is the most likely etiology of this patient's abnormal screening result?

A. Dating error

B. Down syndrome

C. Edwards syndrome

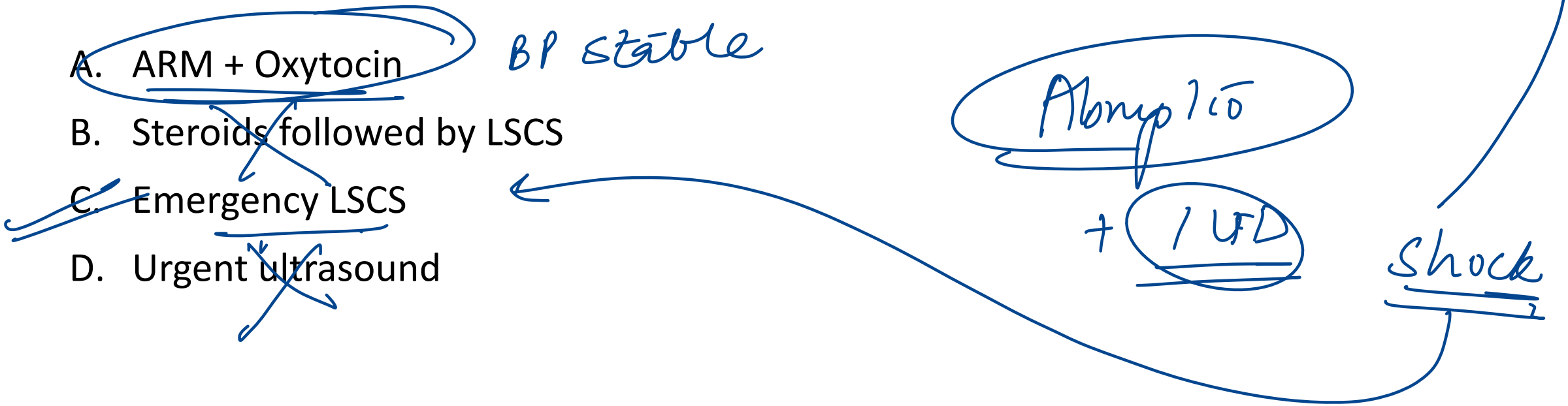
D. Fetal growth restriction



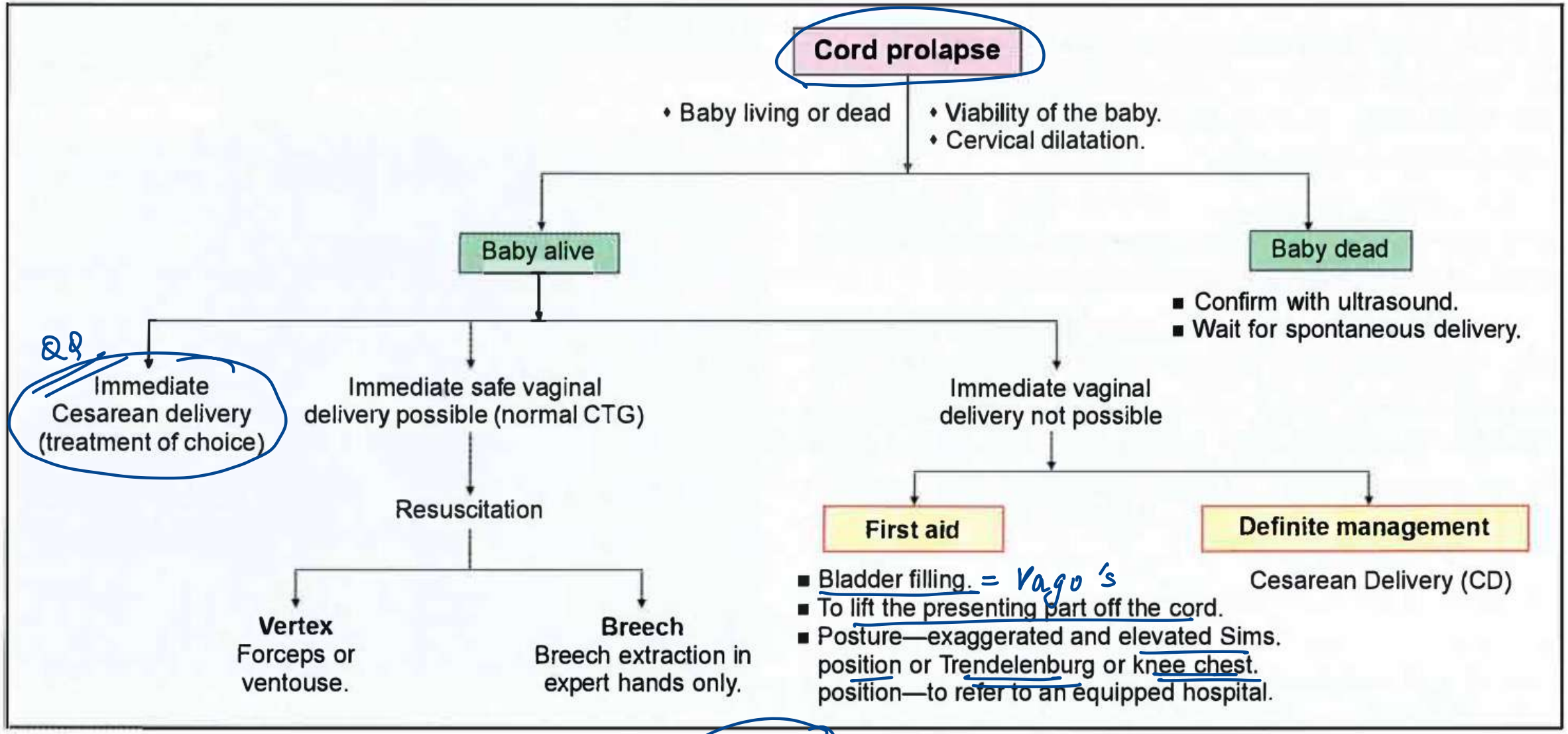
	β hCG	AFP	uE3	Inhibin A
TRISOMY 21	Increased	Decreased	Decreased	Increased
TRISOMY 18	Decreased	Decreased	Decreased	-
TRISOMY 13	Unchanged/ Decreased	Increased	Decreased	-

45. 34 weeks G2P1L1 pregnant lady complains of bleeding PV and abdominal pain since 4 hours. Hb 6gm%, PR is 120/ min, BP-80/60mmHg, P/A- FHS absent & uterus tonically contracted. A PV reveals the cervix is 2 cm dilated, 70% effaced and Vx at -2. She appears distressed. What is the best management option?

A. ARM + Oxytocin
B. Steroids followed by LSCS
C. Emergency LSCS
D. Urgent ultrasound



Flowchart 26.6: Scheme of management of cord prolapse.

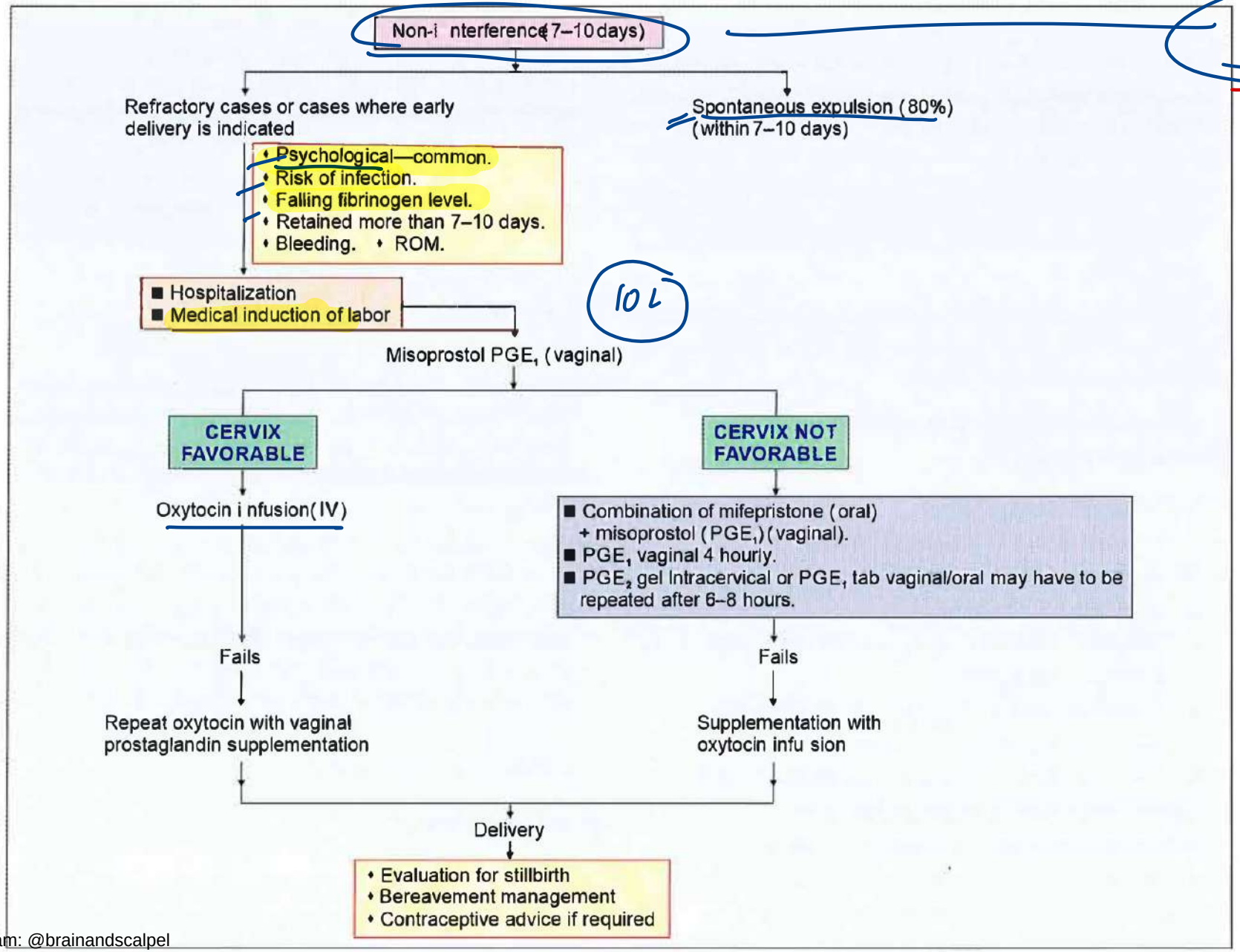


QQ

= Vago's

Funic's maneuver → cord-put back XX

Flowchart 22.6: Scheme of management of IUFD.



46. Which statement is false regarding the active phase of labor?

A. Prolonged latent phase in a multipara is when it is over 12hrs.

B. Arrest of descent means no descent for over 1 hour

C. Minimum cervical dilation rate in nullipara is 1.2 cm/hr

D. Arrest of active phase means no dilation of 4hrs with adequate uterine contractions

Labor Pattern	Criteria – Nullipara	Criteria – Multipara
Prolonged latent phase	>20 hrs	>14 hrs
Protraction of dilatation	<1.2 cm/hr	<1.5 cm/hr
Arrest of active phase	4hrs → no change – Contrn (N)	
Protraction of descent	<1 cm/hr	<2 cm/hr
Arrest of descent	>1 hr	>1 hr
2nd stage arrest	> Or equal to 3hrs	> Or equal to 2hrs

→ Rest
→ Oxytocin
→ CPD → LSCS.
} R/o CPD
→ +1 hr if epidural.

↓

- full cervical dil^n
- station ≥ 2+

↓

Instrumental
- Forceps
- Vacuum

Station above +2

↓

LSCS

Constriction / Schroeder's Ring	**Retraction / Bandl's Ring**
Due to injudicious use of oxytocin	Obstructed labor
At junction of upper and lower segment; does not change	At junction of upper and lower segment; moves upward
Felt on PV	Felt on Per abdomen

16. A 37-year-old woman, gravida 3 para 1, at 28 weeks gestation comes to the OPD due to loss of urine with cough. She reports fetal movement and has had an uneventful pregnancy. Several years ago she had a spontaneous vaginal delivery of a 3.5-kg infant. Her pre-pregnancy BMI is 32 kg/m². Urine culture is negative. Which of the following is the most likely mechanism for this patient's urinary incontinence?

SUI Rx → TOT / TVT
↳ Burch colposusp

A. Decreased systemic blood volume

B. Detrusor muscle hyperactivity → Overactive urge urethral Tone

C. Increased intraabdominal pressure

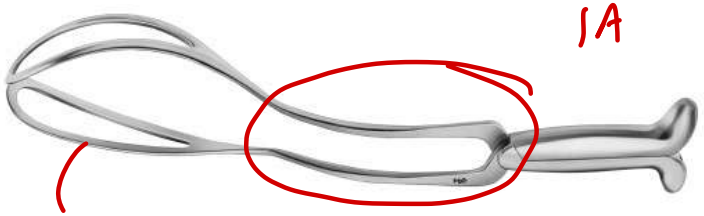
D. Ureteral compression

47. Match the following:

A. Used to deliver the after coming head in breech

B. Used in the correction of asynclitism of the head

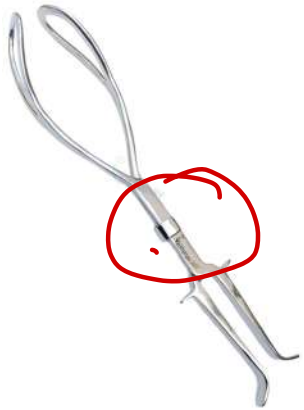
C. Exclusively outlet forceps

1. 

IA

↓

PIPER

2. 

↓

Kielland

3. 

↓

Wrigley's

Simpson / Elliot

CI of forceps and vacuum: Unengaged head/ Incomplete dilation/ CPD/ Brow/face presentation / Coagulopathy in fetus

Mentoanterior –Forceps can be done

CI of vacuum-Preterm head

Forceps (X vacuum)

44. A 30-year-old pregnant woman with coarctation of the aorta is posted for elective C-section. What is the preferred anesthesia in this scenario?

A. Epidural anesthesia

B. General anesthesia

C. Local anesthesia with nerve blocks

D. Spinal anesthesia

r/u hypotensin's

37. A 49-year-old multiparous woman with chronic PID presents with persistent lower abdominal pain. What is the most appropriate treatment?

A. Supracervical hysterectomy with bilateral salpingectomy

B. Radical hysterectomy → cancers

C. Abdominal hysterectomy with bilateral salpingo-oophorectomy

D. Supracervical hysterectomy with tuboplasty

family not complete

↓

Laparoscopy + B/L oophorect

↓

benign - fibroid / endometrios

5. Choose the order in which the following steps of total abdominal hysterectomy are done:

a. Clamp, cut & ligate infundibulopelvic ligament

b. Clamp, cut and ligate uterine vessels — ureter

c. Clamp, cut and ligate round ligament

d. Open uterovesical fold of peritoneum

A. b-c-d-a

B. d-a-b-c

C. c-a-d-b

D. c-b-d-a

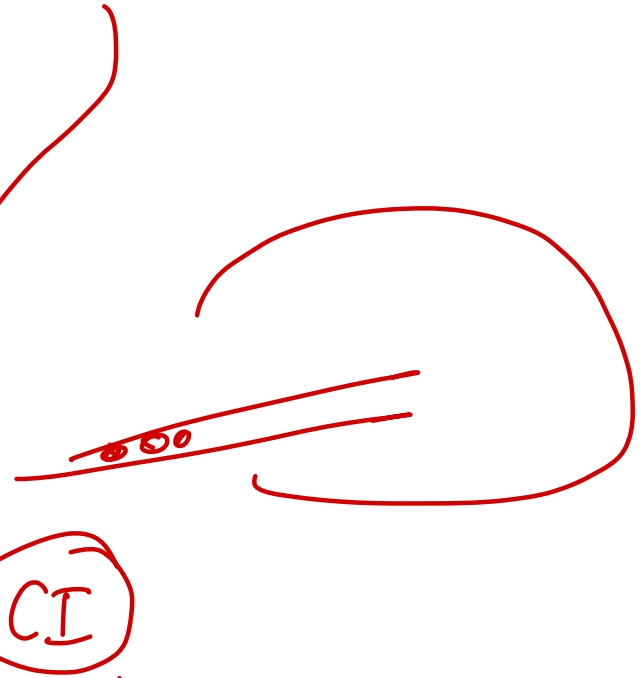
43. Which of the following is a false statement regarding uterine artery embolization for fibroids?

A. Done under radiological guidance

B. PVA particles and glue are used as embolising agents

C. Ovarian failure is one possible complication

D. It can be done in nulliparous women



14. A 35-year-old woman, gravida 1 para 0, at 40 weeks gestation has a protracted labor course for which a cesarean delivery is performed under epidural anesthesia. Shortly after delivery, the patient has chest pain and difficulty breathing. She becomes hypotensive, bradycardic, hypoxic, and unresponsive, and undergoes emergency intubation. The surgical incisions begin to bleed profusely and the patient goes into cardiorespiratory arrest. She is declared dead after 30 minutes of cardiopulmonary resuscitation. The family agrees to an autopsy. Which of the following is the most likely finding during histologic evaluation of her lungs?

A. Alveolar ducts lined with hyaline membranes ~ ARDS
B. Giant cell foreign body response in the lower lobe of the right lung
C. Pulmonary arterioles with lipid globules FE
D. Pulmonary artery branch with swirls of fetal squamous cells AFE

41. What is the minimum colony count (CFU/ml) required to diagnose catheter-associated urinary tract infection (CAUTI)?

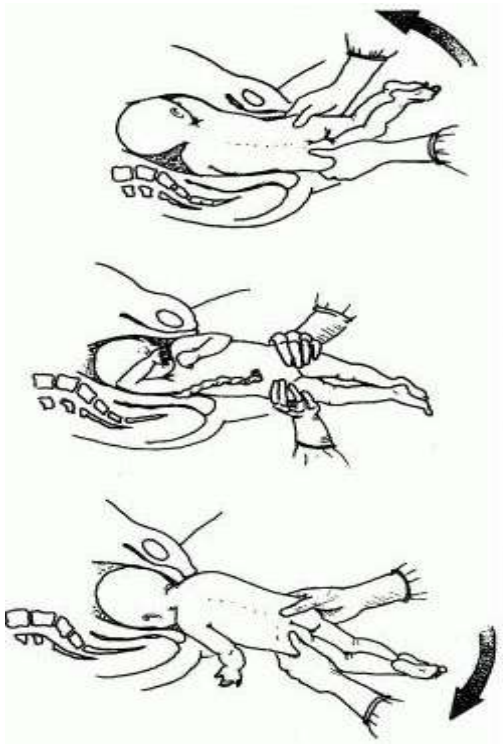
A. More than 10^5 CFU/ml

B. More than 10^3 CFU/ml

C. More than 10^2 CFU/ml

D. More than 10^4 CFU/ml

Type of Specimen	Min CFU/mL for Diagnosis
Midstream clean-catch urine	**1,00,000** of same bacterial species
Catheterized urine specimen	**100** for asymptomatic bacteriuria (CA-ASB) **1000** for CA-UTI
Suprapubic aspirate	**Any growth** of microorganisms



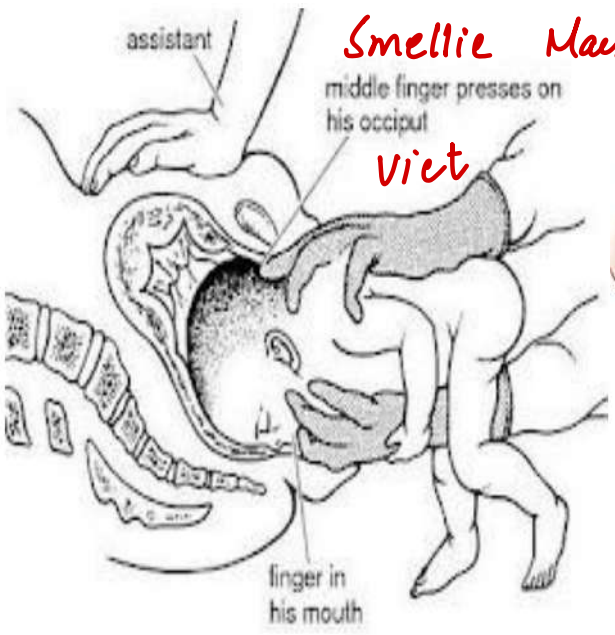
Lorset

Fetus is held by hip or bony pelvis

The fetus is rotated through 180 degrees to deliver the shoulder and arm

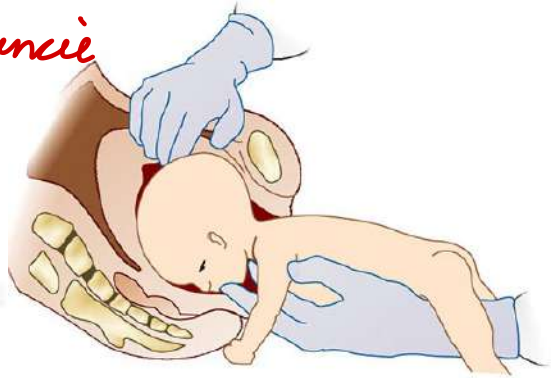
The fetus is rotated to the opposite direction so that the other shoulder and arm are delivered under the pubic symphysis

Burns Marshall

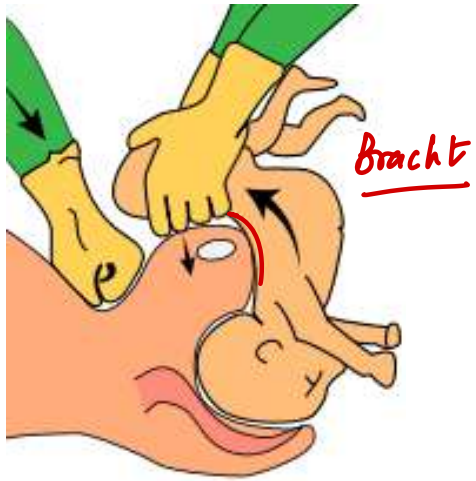


Smellie Mauriceau

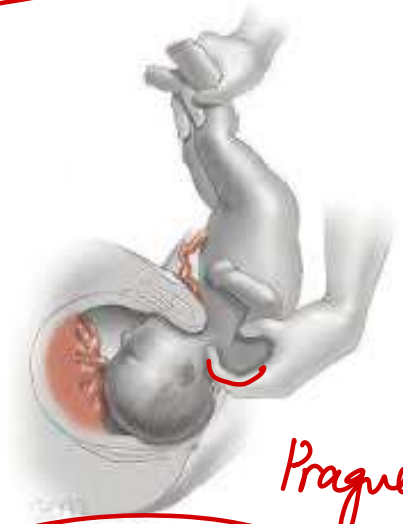
Veit



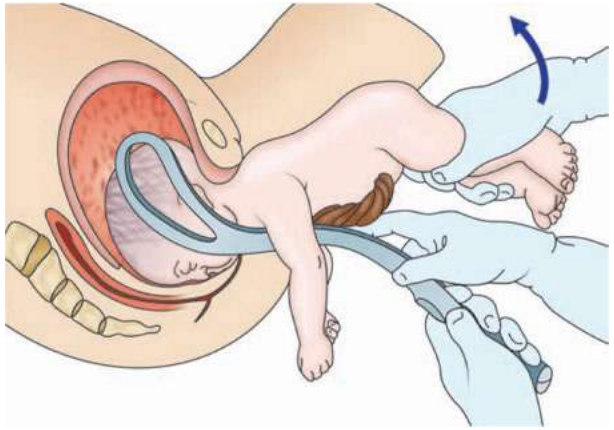
Wigand-Martin



Bracht



Prague



PIPER

Pinard

FDA

Category	Interpretation
A	**Controlled studies show no risk:** Adequate, well-controlled studies in pregnant women have failed to demonstrate risk to the fetus.
B	**No evidence of risk in humans:** Either animal findings show risk, but human findings do not; or, if no adequate human studies have been done, animal findings are negative.
C	**Risk cannot be ruled out:** Human studies are lacking, and animal studies are either positive for fetal risk or lacking as well. However, potential benefits may justify potential risk.
D	**Positive evidence of risk:** Investigational or postmarketing data show risk to the fetus. Nevertheless, potential benefits may outweigh risks.
X	**Contraindicated in pregnancy:** Studies in animals or humans, or investigational or postmarketing reports, have shown fetal risk that clearly outweighs any possible benefit to the patient.

Semen

Components from Seminal Vesicles *(60% of total volume)*:

- Fructose
- Phosphorylcholine → Florence
- Ergothioneine
- Ascorbic acid
- Flavins
- Prostaglandins
- **Components from Prostate** *(20% of total volume)*:
- Spermine → Barbeiro → prime acidi
- Citric acid
- Cholesterol and phospholipids
- Fibrinolysin and fibrinogenase
- Zinc
- Acid phosphatase

173. Identify the correct sequence of maturation of sperms in spermatogenesis.

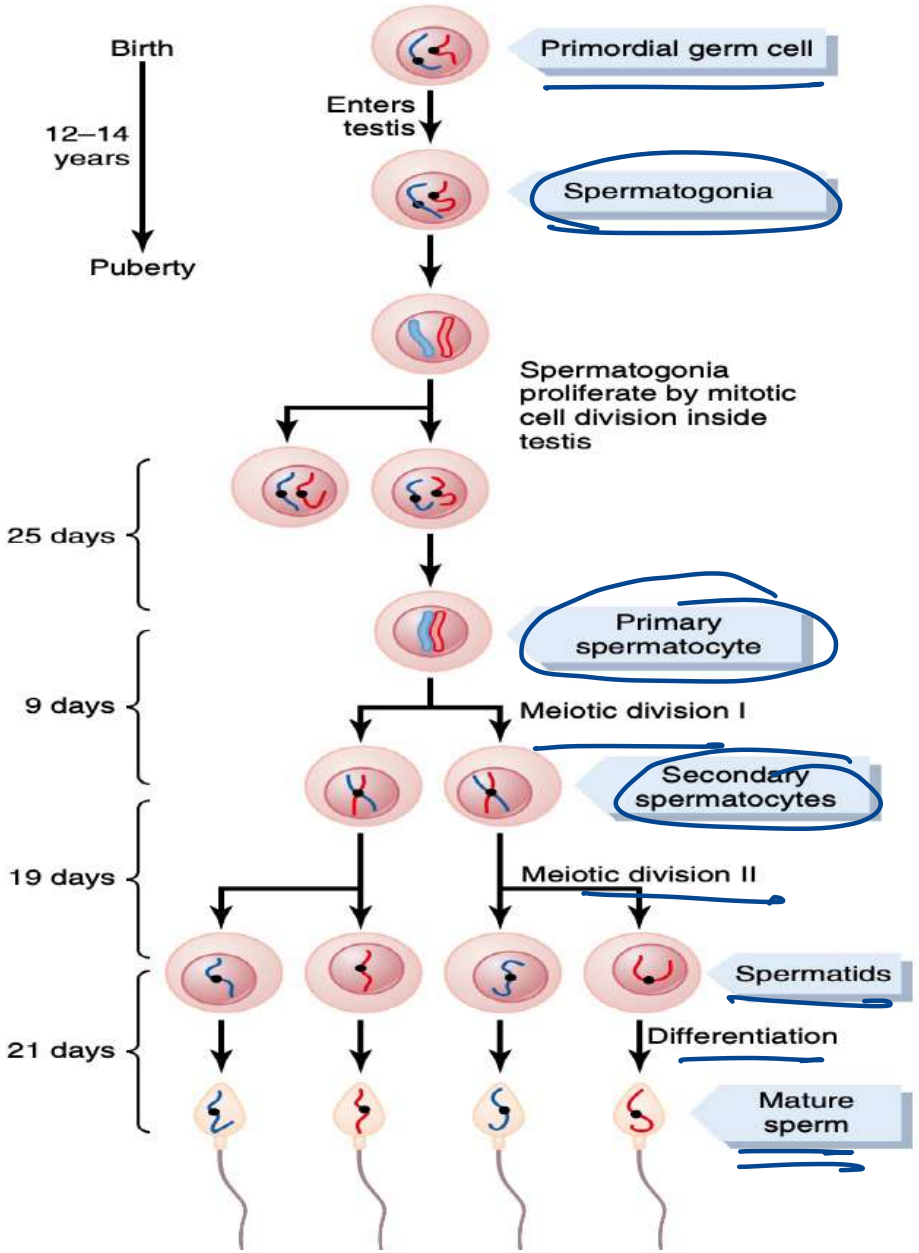
1. Spermatozoa
2. Spermatogonia
3. Spermatocytes
4. Spermatid

A. 2, 3, 4, 1

B. 3, 2, 4, 1

C. 2, 3, 1, 4

D. 2, 4, 3, 1



Basal

Luminal

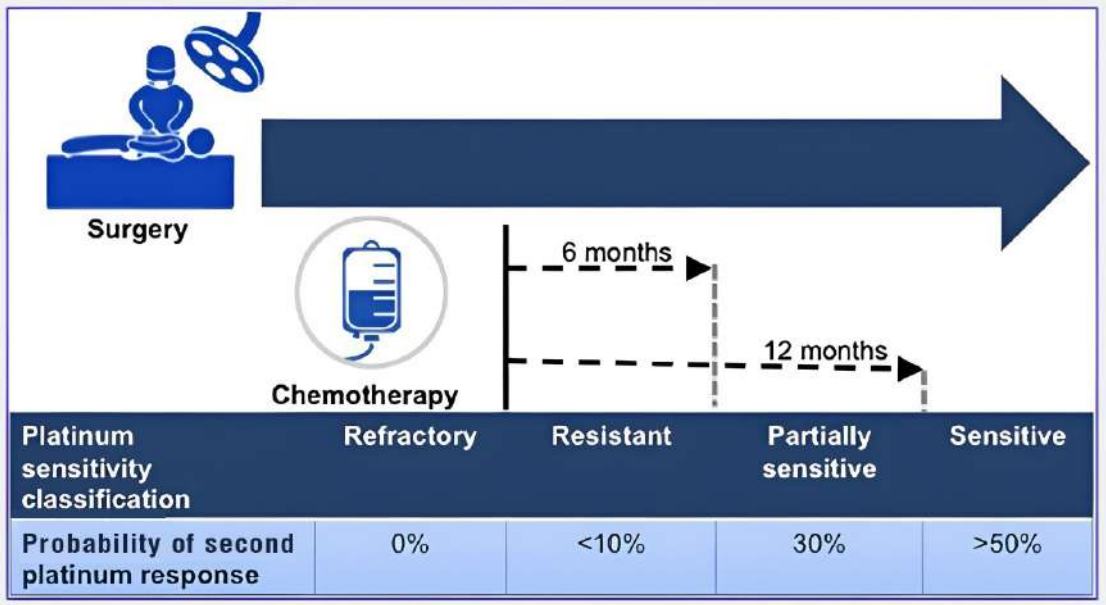
- Spermatogenesis → 72d
- Sperm maturation (epididymis) → 14d.

90d

3mon

165. Which of the following statements is true regarding the treatment of recurrent ovarian cancer?

A. Platinum resistant if recurrence > 12 months
B. Partial platinum resistant if recurrence is within 6-12 months
C. Platinum sensitive if recurrence > 6 months
D. All of the above



Platinum sensitivity classification	Refractory	Resistant	Partially sensitive	Sensitive
Probability of second platinum response	0%	<10%	30%	>50%

- **Platinum-refractory disease**: This includes women who progress during primary chemotherapy. It has the worst prognosis, as these patients do not respond to platinum-based chemotherapy at all.
- **Platinum-resistant disease**: This includes women who relapse within 6 months of completing primary therapy. Bevacizumab has been approved for the treatment of platinum-resistant disease due to its ability to inhibit angiogenesis, which is crucial for tumor growth and metastasis.
- **Platinum-sensitive disease**: This includes women who relapse more than 6 months after completing primary therapy. These patients are considered to have a better prognosis and are treated with a platinum-based combination such as carboplatin and paclitaxel or gemcitabine.

PEDIATRICS

2. What is the expected growth velocity in a child after 4 years?

A. 6 cms/year
B. 3 cms/year
C. 8 cms/year
D. 10 cms/year

Weight with age:

Birth x
20-40g/day * 3months
400g/month till 1 year
5mon 2x
1yr 3x
2yr 4x
3yr 5x
5yr 6x
7yr 7x
10yr 10x

Height with age:

Birth ~50cm
3mon ~ 60cm
1yr ~ 75cm
2yr ~ 90cm
4yr ~ 100cm
6cm / yr till 12yrs

US:LS :

Birth ~ 1.8 : 1
3yr ~ 1.3 : 1
7yr ~ 1 : 1
Adults: 0.9

HC

Birth-32-35cm
1st 3month: 2cm/mon
Next 3month: 1cm/mon
Next 6month: 0.5cm/m
Next 2 yrs: 0.25cm/ms
>2cm/month always abN

QP

HC > CC by 3cm at birth
At 9-12mon: HC=CC
>1yr: CC > HC

Surrogate marker of height: Arm span
Arm span < length by 2.5cm at birth
Equal at 11yrs
Arm span > length by 1cm after that
Mid-parental height: $\frac{♀ + ♂}{2} \pm 6.5$

Proportionate short stature: GH def
Dispoportionate short stature-Short trunk
SED, MPS, Pott spine, Alagille Sx
Dispoportionate short stature-Short limb
Rickets, Achondroplasia, OI, Congenital hypothyroidism

15. Which of the following is not included as a component of Jones criteria for diagnosing acute rheumatic fever?

A. Chorea
B. Shortened PR interval
C. Erythema marginatum
D. Arthralgia

Evidence of recent streptococcal infection (e.g., ↑ASO/anti-DNase B, positive throat culture or rapid antigen test) PLUS

2 major criteria OR

1 major + 2 minor criteria

- ↑ESR/CRP
- Fever
- arthralgia
- ↑PR

JONES

- Arthritis
- Carditis
- EM
- Nodules
- Sydenham's chorea

JOC → Haloperidol

Refractory → valproate

≤1/1000

≤2/1 lakh school going

Population	Arthritis Consideration
Low-risk	Polyarthritis only
Moderate/high-risk	Polyarthritis, monoarthritis, or polyarthralgia may count → Major

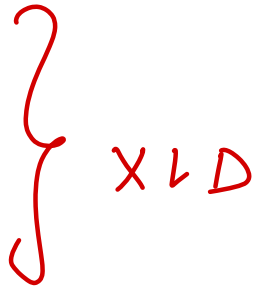
29. Identify the X-linked disorder from the options below:

A. Color blindness
B. Cystic fibrosis
C. Sickle cell anemia
D. Thalassemia

INHERITANCE

DMD/ BMD
Hemophilia A / B
G6PD
Wiscott Aldrich/ Bruton's/ CGD
Lesch Nyhan
Hunter/ Fabry
Lowe
Colour blindness
Menke's
OTC deficiency

RP
Rett syndrome
Alport
X-linked hypophosphatemic rickets
IP



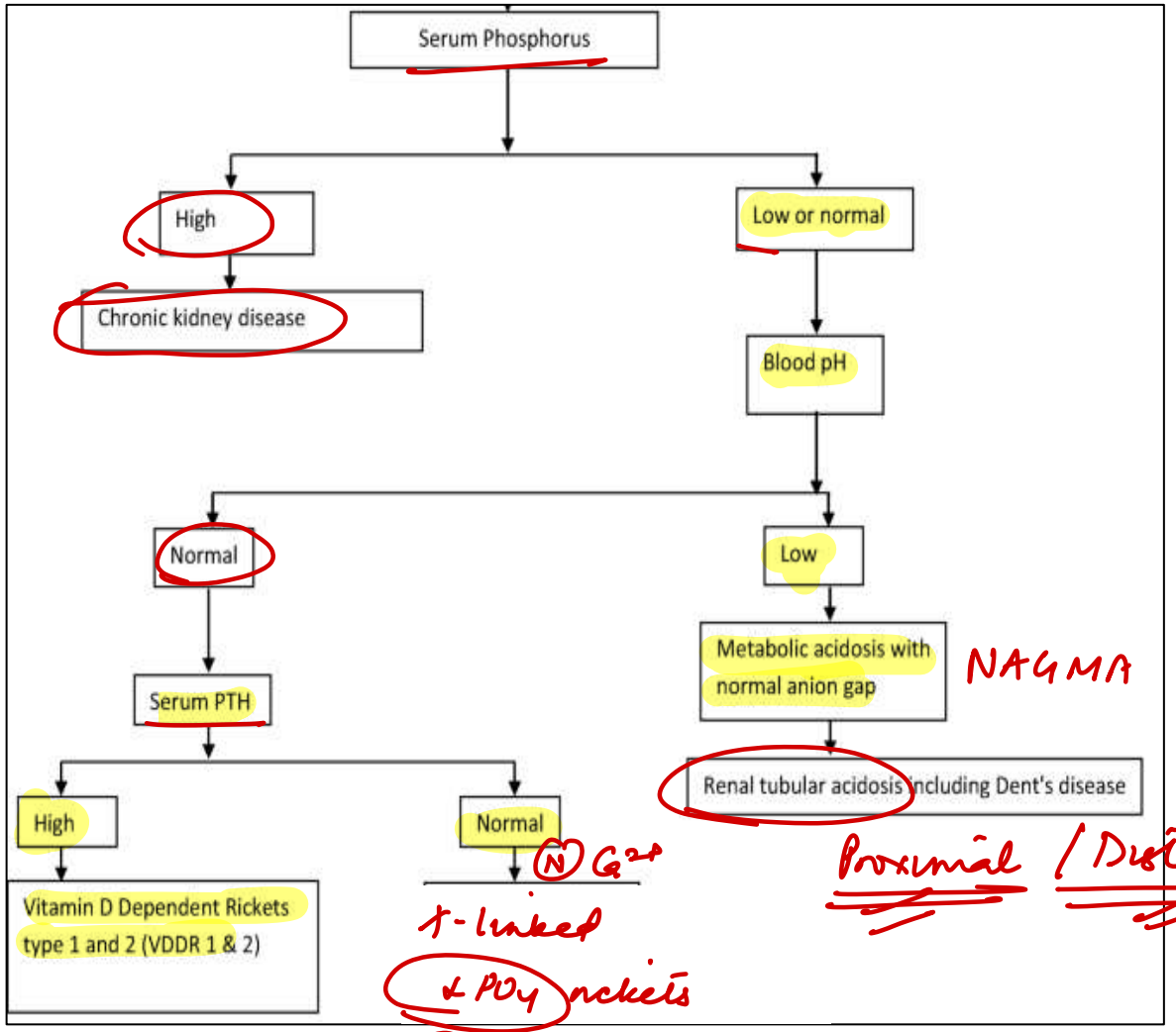
28. A child with rickets not responding to standard treatment is evaluated. Investigations reveal serum calcium of 9 mg/dL, phosphate 2 mg/dL, elevated alkaline phosphatase, normal PTH, and a normal ABG. What is the most likely diagnosis?

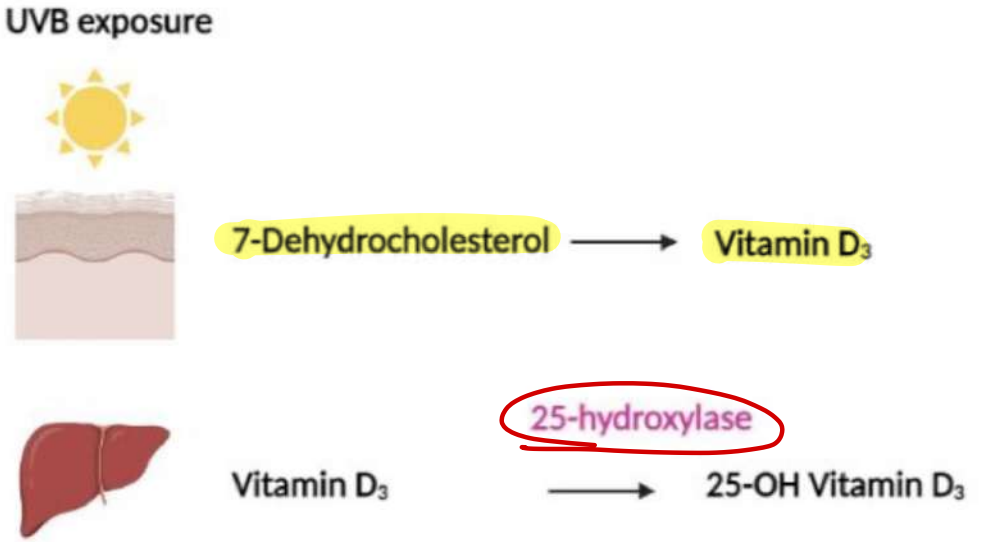
A. Chronic kidney disease

B. Hypophosphatemic rickets

C. Vitamin D–dependent rickets, type 2

D. Renal tubular acidosis





31. A newborn who died shortly after birth was found to have multiple fractures. What is the most probable diagnosis?

A. Osteogenesis Imperfecta Type III

B. Osteogenesis Imperfecta Type I

C. Osteogenesis Imperfecta Type II

D. Osteogenesis Imperfecta Type IV

OI I

Subtype	Clinical Features	Inheritance	Prognosis
Subtype I	Blue sclera, normal stature, dentinogenesis imperfecta, hearing impairment, joint laxity	Autosomal dominant	Compatible with survival
Subtype II	Death in utero or within days of birth, multiple fractures, blue sclera	Mostly autosomal recessive; few autosomal dominant	**Perinatal lethal**
Subtype III	Multiple fractures, progressive kyphoscoliosis, hearing loss, dentinogenesis imperfecta	Autosomal dominant (75%) / recessive (25%)	Progressive, **deforming**
Subtype IV	Normal sclerae, short stature, dentinogenesis imperfecta +/-	Autosomal dominant	Compatible with survival

mc

26. You are called to the nursery to evaluate a newborn infant. The mother is a 24-year-old primigravida. The infant was delivered at 39-weeks gestation via emergent cesarean section due to maternal hypertension and non-reassuring fetal heart tones. On examination, the infant's weight is 2.6 kg placing him in the 5th percentile, height is 18 inches (46 cm) placing him in the 5th percentile, and head circumference is 13 inches (33 cm) placing him in the 10th percentile. The infant's head seems large for his body. There is a paucity of subcutaneous fat. The remainder of the physical examination is unremarkable. This infant is at risk for having which of the following?

A. Hip subluxation
B. Polycythemia
C. Hyperglycemia
D. Hyperthermia

SGA

A. Perinatal asphyxia
B. Polycythemia
C. MAS (post-term)
D. Hypothermia
E. Hypoglycemia
F. Hypocalcemia

40. A 2-month-old boy is brought to the emergency department for evaluation of cyanosis. He became fussy and sweaty while taking his bottle, and his lips "turned blue" for several minutes during the feeding. The infant has had similar episodes during feeding and crying, but these resolved quickly. The patient was born at 39 weeks gestation, and his birth weight was average for gestational age. His weight gain has been slow, currently at the 5th percentile. On examination, the infant is ill-appearing, agitated, cyanotic, and tachypneic. Cardiac auscultation reveals a grade 2/6 crescendo-decrescendo systolic ejection murmur at the left upper sternal border and a single second heart sound. The patient is placed in a knee-chest position immediately. This maneuver improves the patient's condition predominantly by which of the following mechanisms?

A. Decreased pulmonary vascular resistance

B. Decreased systemic vascular resistance

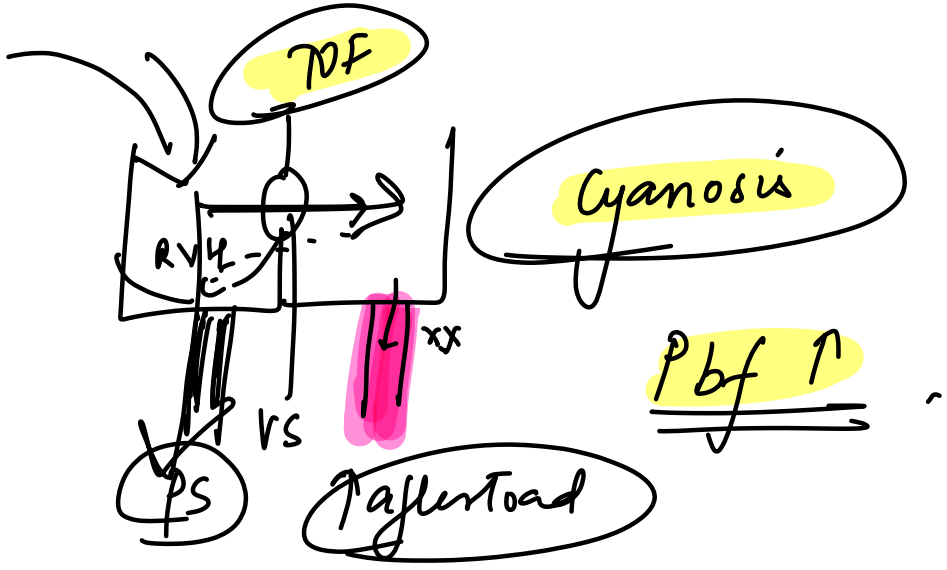
C. Increased systemic vascular resistance

D. Increased systemic venous return

Cyanotic spell - TOF

↑ systemic vasc R

↑ afterload ↑ preload



33. All of the following are steps in the Baby-Friendly Hospital Initiative for successful breastfeeding, except:

A. Support mothers to recognize and respond to their infants' feeding cues
B. Encourage the use of feeding bottles and pacifiers in the early postnatal period
C. Facilitate immediate skin-to-skin contact and early initiation of breastfeeding
D. Do not provide fluids or food other than breast milk

Every facility providing maternity services and care for newborn infants should:

1. **Have a written breastfeeding policy** that is routinely communicated to all health care staff.
2. **Train all health care staff** in the skills necessary to implement this policy.
3. **Inform all pregnant women** about the benefits and management of breastfeeding.
4. **Help mothers initiate breastfeeding within one hour of birth.**
5. **Show mothers how to breastfeed** and how to maintain lactation even if they are separated from their infants.
6. **Give infants no food or drink other than breast milk**, unless **medically indicated**.
7. **Practice rooming-in**—allow mothers and infants to remain together **24 hours a day**.
8. **Encourage breastfeeding on demand.**
9. **Give no pacifiers or artificial nipples** to breastfeeding infants.
10. **Foster the establishment of breastfeeding support groups** and refer mothers to them on discharge from the hospital or birth center.

32. All of the following are screening tests for developmental assessment, except:

A. Trivandrum development screening chart
B. Denver-II developmental screening test
C. Stanford-Binet Intelligence Scale
D. Phatak's Baroda screening test

Definitive Tests	Screening Tests
- Bayley Scales of Infant and Toddler Development (Bayley-III)	- Denver-II Developmental Screening Test
- Stanford-Binet Intelligence Scale	- Phatak's Baroda Screening Test
- Wechsler Intelligence Scale	- Trivandrum Development Screening Chart
- Developmental Activities Screening Inventory (DASI-II)	- CAT / CLAMS
	- Goodenough Harris Draw-a-Man Test
	- Gesell Figures and Block Skills

13. A 2-day-old girl is in the newborn nursery with persistent crying, tremors, tachypnea, sneezing, and diarrhea. She was born vaginally and had been breastfeeding well until several hours ago when she became tachypneic. Her mother has poorly controlled schizophrenia and did not receive prenatal care. The patient's mother also had a positive hepatitis C antibody test during postnatal laboratory testing. On physical examination, the girl has increased tone in all extremities. Chest radiograph shows normal lung fields. Which of the following is the most appropriate pharmacotherapy for treatment of the newborn's symptoms?

A. Flumazenil

B. Folic acid

C. Methadone

D. Naloxone

opioid withdrawal

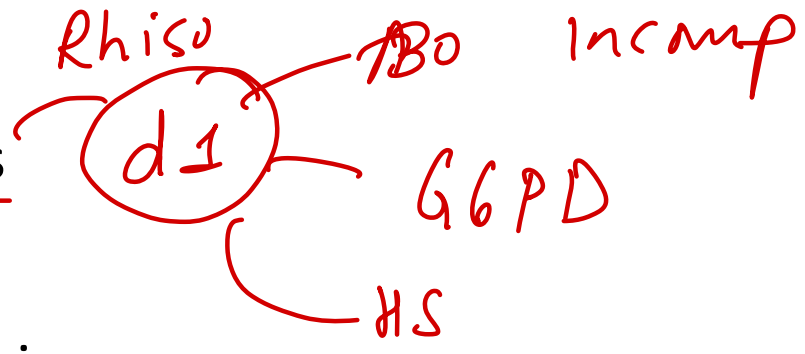
21. An 8-day-old neonate presents with jaundice. Which of the following is least likely to be the cause of jaundice after the first week of life?

A. Breast milk jaundice

B. Erythroblastosis fetalis

C. Cystic fibrosis

D. Congenital biliary atresia



42. All the following PFT findings in a child are suggestive of asthma except:

A. Increase in FEV1 > 12% after salbutamol inhalation

B. FEV1/FVC < 80%

C. Day-night variation of FEV1 > 15% >20%

D. Decrease in FEV1 > 15% after exercise