


Cases :

- AUB
- Post-menopausal bleeding
- Vaginal Discharge
- Urine Incontinence
- Pelvi-abdominal mass
- Infertility
- APH
- PROM
- HEG
- puerperal pyrexia
- chronic DM
- GDM

كل موضوع فيهم شامل سلايدات الموضوع ودوسية ضياء ودوسية الهاشمية و check list يزن وشوية نوات من دكتور نادين

دعواتكم 

الموضوع:

الدرس:

AUB

① past menstrual cycle: Regular, Frequency, Duration, Amount
Dysmenorrhea (primary, secondary) / (# of pads/clots) ↙ ↘

② Analysis of current Bleeding:

- Regular / Frequency / Duration / Amount / Severity ↗ # of pad affect daily activities.
- Associated symptoms: pain, Fever, mass, Discharge

• IMB, PCOB ↳ pelvic pain / Dysparunia

• Bleeding from other orifices (Hematuria/epistaxis/Broising)

• Anemia symptoms ⇒ Dizziness, LOC, palpation, SOB, Fatigue.

• preceded by trauma, procedure, IUD, sexual intercourse
pelvic surgery.

③ Medical Hx → looking for systemic causes of Bleeding.

• Bleeding disorder (Bruising / Gum bleeding)

• Thyroid dz → hypo/hyper~~thyroid~~

• Hyperprolactinemia → Galactorrhea / visual disturbance

• DM / HTN / Liver failure.

• cancers (endometrial / ovarian / Breast / cervical / colon)

④ Drug Hx: Anticoagulant (Heparin), Tamoxifen. (end. hyperplasia)

→ Contraceptive pills → missed pill

→ IUD → think about perforation.

⑤ Family Hx:

• cancer > (ovarian / endometrial / cervical / Breast / colon)

• Bleeding disorder. • DM / HTN.

⑥ social Hx: smoking / alcohol.

الموضوع :

الدرس :

7) Age & menses →

* prepubertal → precocious puberty / Foreign body

* Post-menopausal → DDX.

* Childbearing

→ exclude pregnancy (test) ⇒ By Hx: LMP +
if she have Regular cycles / not lactating + symptoms of
pregnancy: N&V, Breast tenderness, Urine frequency, constipation

→ exclude complication of contraception

(missed pills → withdrawal bleeding, IUD)

→ Going to PALM coien to know wether structural or
non structural cause:

PALM

- Leiomyomata = Fibroid ⇒ pressure symptoms ⇒ (urine frequency or retention, constipation)
⇒ Recurrent pregnancy loss (submucosal)
- Adenomyosis ⇒ HMR + Dysmenorrhea (more PG)
- Malignancy ⇒ wt loss, anorexia, pallor, mass.

COEIN

● Anovulation →

Dysfunctional Uterine bleeding (By exclusion /
Coovulatory Dysfunction)

Hypothalamic Dysfunction ⇒ anorexia nervosa
Low BMI
excessive exercise
Hypothyroidism / Hyperprolactinemia

PCOS (Irregular cycles / Hirsutism / Acanthosis Nigricans.
Obesity)

8) previous Investigation : US / TFT / Pap smear / Biopsy.

الموضوع :

الدرس :

→ stable ?

physical exam: Vitals + BMI

General

- signs of anemia : pallor, tachycardia.
- signs of Hypo/Hyperthyroidism. → tachy
↳ BMI ↑, Bradycardia
- signs of metastasis → jaundice, cachexia, ↓BMI.

Neck

thyroid exam

Breast

Galactorrhea, masses

Abdomin

ascitis, mass., spider naevi (liver dz)

pelvic

- Inspect vulva + perineum (mass / fissure)
- speculum → vagina + cervix → ulcers / mass / polyp.
- Bimanual → uterus + adnexa → size + shape / mass.

Investigation

- pregnancy test
- CBC
- Ultrasound ⇒ looking for structural causes +
pick up endometrial thickness
↳ site
Biopsy
- TST + prolactin.
- coagulation profile.
- LFT, KFT
- pub smear.

الموضوع :

الدرس :

Postcoital bleeding / contact Bleeding.

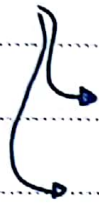
DDx:

(Broad spectrum)

- ① Acute / chronic Cervicitis \Rightarrow mucopurulent discharge \Rightarrow Doxycycline
- ② Cervical ectropion \Rightarrow more columnar proliferation

100 mg x 2 / 7 day

\Rightarrow more estrogen \Rightarrow pregnancy / COCP.



conservative \Rightarrow 3 month after delivery / stop COCP

Cauterization \Rightarrow thermal, Cryotherapy.

- ③ Cervical ca. \Rightarrow Do pap smear
- ④ Cervical polyp. \Rightarrow polypectomy + send histopathology.

* Atrophic Vaginitis

* STD.

IMB

- physiological \Rightarrow mid cycle spotting at time of ovulation
- Iatrogenic \Rightarrow Contraceptive pill withdrawal, B₁ IUCD
- Infection \Rightarrow endometritis, cervicitis, vulvovaginitis.
- Benign \Rightarrow polyp, fibroid, ectropion
- Malignant \Rightarrow cervical endometrial ca.
- Bleeding dz.

Post-menopausal Bleeding

الدروس:

Hx * Age / GP

① Analysis of bleeding \Rightarrow Duration, Amount, color
clots, how it impact life (severity), previous episodes

- symptoms of anemia \Rightarrow dizziness, LOC, palpitation
SOB, fatigue.

• Associated symptoms \Rightarrow

vaginal discharge \Rightarrow Infection (chlamydia, gonorrhoea)
pain, mass, back pain, wt loss. (trichomonas / candida)
related to intercourse?

② Risk factor of endometrial ca. المتغيرات

- early menarche + Late menopause + Nulliparity \downarrow
 - PCOS + Obesity
 - Tamoxifen + ERT
 - DM + HTN
 - white Race + high socio-economic status.
- age of menarche
• age of menopause
• GP \rightarrow

③ Past medical Hx: or ④ Family Hx of :-
endometrial, cervical, ovarian, breast, colon Ca?
 \rightarrow Thyroid dz, Bleeding dis?

④ Drug Hx: HRT, Tamoxifen, Anticoagulant?

⑤ Menopausal Symptoms: Hot flushes + Dryness of vagina.

الموضوع:

الدرس:

- ⑥ past Gyne Hx:
- Age of menarch + menopause
 - contraception Hx
 - pap smear
 - previous Gyn procedures / operation

- DDx ⇒
- Atrophic endometritis / vaginitis.
 - endometrial hyperplasia / (ca.) 10%
 - endometrial / cervical polyp.
 - exogenous estrogen.
 - Trauma / uterine sarcoma / cervical ca.
 - Infection.

PE

vitals + BMI ↗ ↓ wt for malignancy.
↳ obesity is Risk factor of endo. ca.

General

- signs of anemia. ⇒ palor / tachycardia / conjunctival pallness / ↓ BP.

- signs of malignancy

cachexia, lymphadenopathy, ascitis, abdominal mass, Lk edema. or pelvic

pelvic exam ① Inspection → vulva + perinum
mass / Fissure / hemorrhoids.

pessary!

② speculum

↳ Foreign bodies / polyp / ulcers / Atrophic changes.

Dryness / pallor / absent Rugeae / thin mucosa. ↙

③ Bimanual ↗ Adnexal mass
↳ uterine size / mobility

④ Take pap smear.

→ post-menopausal bleeding

الموضوع:

الدرس:

Investigation:

① pap smear

② TVS → thickness → $> 4\text{m}$ → endometrial biopsy

③
↓
D&C
↓
Hysteroscopy
pipelle.

Treatment → according to cause.

* Atrophic endometris → local estrogen, combined HRT.

* endometrial Hyperplasia / polyp / ca → مراقبة

* Infection → according to micro-organism. . الموضوع

Vaginal Discharge / Leukorrhea: الموضوع

الدرس:

(Hx) * Age / Gravida + para / LMP.

① Analysis of discharge ⇒ amount / color / odor / consistency
mixed with blood.

• associated with itching or irritation

most irritant ⇒ candidiasis / mild irritant = trichomoniasis.

• associated with menstruation

• Fever / pain (abdominal or pelvic) / malaise ⇒ PID

mostly at night ⇒ pinworm(?)

• Urinary symptoms ⇒ Frequency / Dysuria / Urgency

• IUD / procedures: P&C / HSG / Hysteroscopy.

• Use of Irritant ⇒ Soap, spermicides, creams

change the vaginal pH → less acidic → risk for infection

• Barrier: method of contraception (condom / diaphragm / cap)

* Medical Hx: DM.

protective

* Drugs: Antibiotics (Resistance)

Steroids / chemotherapy (↓ immunity)

• previous similar Hx

• previous STDs.

الموضوع:

الدرس:

DDx:

- ① Bacterial vaginosis \Rightarrow Fishy odor, not irritant / profuse
- ② Candidiasis \Rightarrow extremely irritant / scanty / youghurt like.
- ③ Trichomoniasis \Rightarrow mild irritant / profuse / yellowish (STD)
- ④ Cervicitis \Rightarrow Mucopurulent discharge \Rightarrow chlamydia + gonorrhoea
- ⑤ Acute PID \Rightarrow Fever / Acute lower abdominal pain /
Foul smelling discharge
- ⑥ Atrophic vaginitis \Rightarrow menopause or use antiestrogen drugs.
- ⑦ STD \Rightarrow Gonorrhoea \Rightarrow mucopurulent discharge + urinary
symptoms + similar symptom with
husband.
- ⑧ UTI / vesicovaginal fistula.
- ⑨ endocervical polyp
- ⑩ Cervical ca \Rightarrow think about adenocarcinoma of endocervix!

physical exam

Vitals \rightarrow Fever / tachy + BMI.

• Inspection \rightarrow Foreign bodies / Lesions

• Per speculum \rightarrow signs of Inflammation: Redness
 \rightarrow source of discharge
 \rightarrow Analyse the discharge.
 \rightarrow lesions: ulcers / Nodules / mass

• Bimanual + PV \rightarrow Jumping sign / motion tenderness \rightarrow Acute PID

\rightarrow Adnexal fullness \rightarrow Tubo-ovarian Abscess / cyst.
or tenderness

الموضوع :

الدرس :

Investigation :

① Microscopic exam: = wet Mount (slide with normal saline)

- Bacterial vaginosis → clue cells
- candidiasis → hyphae / Buds → like shoe print
بمائل مثل تفرعات البسفرة
- Trichomoniasis → Flagellated or motile protozoan.

② KOH → dissolve non fungal elements so you can detect hyphae

→ candidiasis.

③ Whiff test → add KOH & look for fishy odor →

→ Bacterial vaginosis.

④ Vaginal pH → Nitrazine pH paper

- Bacterial vaginosis & Trichomoniasis → more Alkaline
- candidiasis → more acidic

Normal pH = 3.8 - 4.5.

⑤ Vaginal culture -

⑥ Cervical culture. → N. Gonorrhoea / chlamydia Trachomatis
mostly Both.

الموضوع:

الدرس:

Treatment:

* Bacterial Vaginosis \Rightarrow Metronidazol 500mg X2 / 7 days.

* Candidiasis \Rightarrow Fluconazole 150mg \rightarrow single dose.

* Trichomoniasis \Rightarrow Metronidazol \rightarrow 2gm \rightarrow single dose +
treat the partner \rightarrow STD

* Acute cervicitis \rightarrow polymicrobial \rightarrow Doxycycline \rightarrow 100mg X2
7 days.

* Acute PID \rightarrow polymicrobial \rightarrow Doxycycline \rightarrow 100mg X2
mild 14 days
effective \rightarrow gonorrhoea
anaerobic \rightarrow Ceftriaxone IM single dose
Metronidazol 500mg X2
14 days.

severe \rightarrow IV cephalosporin
 \rightarrow Doxycyclin.

الموضوع:

الدرس:

Urine Incontinence

تعريفات

- urge incontinence = Overactive Bladder = Detrusor Over-activity Incontinence
- Stress Urinary Incontinence = Urodynamic incontinence

- Mixed UI = SUI + DO / DOI

↳ overactivity without incontinence.
↳ you see ↑ Intra-vesicular pressure

do to involuntary contraction without feeling incontinence (pass urine)

⇒ Urge Incontinence ⇒ Involuntary passage of urine preceded by sudden strong desire to pass urine

⇒ SUI ⇒ Involuntary passage of urine associated with ↑ IAP (cough, laugh, sneeze, strain)

⇒ Mixed ⇒ Having Both....

⇒ Over-active Bladder syndrom = Urgency + Frequency + Nocturia ± Urge Incontinence

⇒ Functional incontinence ⇒ involuntary passage of urine

Due to physical or mental impairment, not related to Lower urinary tract dysfunction.

الموضوع :

الدرس :

Hx ⇒ Age / LMP / GP دائماً ابدان فيرم

① Type of incontinence

① ⇒ stress urinary I ⇒ Involuntary leak with ↑ IAP:
sneeze, cough, laugh, carry heavy object

② ⇒ Urge Incontinence ⇒ "when she need to void, can't
make it to toilet" ⇒ Incontinence preceded by urgency
+ Frequency + Nocturia.

③ ⇒ Overflow incontinence ⇒ continuous dribbling +
feel of incomplete emptying
↳ think about Neurogenic bladder.

④ ⇒ Mixed UI ⇒ more than one.

⑤ Functional incontinence ⇒ impaired mobility
Arthritis Depression / Delirium.

② Analysis of Incontinence ⇒ physical or mental impairment ?

Duration, Frequency, Severity ↳ how many pads
↳ how it affect daily activity

③ Ask about other urinary symptoms.

Frequency, Nocturia, Urgency, dysuria, hematuria, Hesitancy
Feel of incomplete emptying.

④ Ask about fluid intake, caffiene, alcohol, smoking.

كم كاسة تقريباً

⑤ Ask about trauma.

الموضوع :
الدرس :

Fecal incontinence.

In case of stress incontinence => has two causes

① POP

② Hypermobility urethra => Rare.

mass protruding from vagina (?)

حتى لوه نسال
هاي انستة .

causes

① * Multiparity => parity (?)

(past obs)

space between pregnancies

prolonged labor / Instrumental delivery
tears / Laceration.

Large babies.

② * Menopause => Remember ↓ estrogen = weak ligaments.

↳ symptoms = hot flushes, difficult sleep.

③ * connective tissue abnormalities =

flat foot, hernias, varicose.

* predisposing factor of POP

chronic cough, chronic constipation, obesity, ascitis

↳ COPD, congestive HF.

الموضوع:

الدرس:

② Medical Hx: Neurological dz.

DM / MS / (Neurogenic bladder) overflow incontinence.

prolapse / COPD / Asthma / UTI

③ Surgical Hx:

• pelvic surgeries (?) / Hysterectomy (valvuloprolapse)

• spinal surgeries (?)

④ Drug Hx:

Diuretics, Anticholinergic / muscle Relaxant.

HRT, TCA

- ACEI / CCBs (?)

Menopause

(?)

↳ depression

⑤ Family Hx: DM, Marfan's dz.

الموضوع :

الدرس :

DDx of Urinary Incontinence:

Reversible ⇒ DIAPPERS.

Delirium, UTI, Atrophic vaginitis, Pharmaceutical, psychological

Excess urine Output (↑ Fluid intake / caffeine / alcohol / diuretics

DM) → polyuria?

Restricted Mobility, Stool impaction.

Genitourinary causes

- stress Incontinence
- DO
- Mixed UI
- Urogenital fistula
- Urethral Diverticulum

vesicovaginal
urethrovaginal

Non Genitourinary

- Functional → impaired mobility
→ mental dis.
- Drugs.
- Neurogenic → DM
→ MS.

الموضوع:

الدرس:

PE

↑ Intraabdominal pressure → POP
↓
SUI

① General → vitals + BMI (obesity → DM)
if pt is mobile / mental status.

chest exam
↓
chronic cough
COPD.

② Abdominal → scars, mass (press the bladder), hernias
costovertebral tenderness

③ Neurologic exam → Inspection → Back: deformity, hair tuft
lower extremities: sensation

pedal nerve

strength / Deep tendon Reflex.

perineum → sensation.

→ speculum + Bimanual → pelvic mass

④ pelvic exam = ● Atrophic vaginitis:

loss of rugae / pale mucosa / thin mucosa

● Cystocele →

put Sims speculum at posterior vaginal wall
cough → look at mass from ant vaginal wall.

● Urethral Diverticulum:

→ palpate suburethral area → mass
→ tenderness
→ watery discharge with compression.

● Hyper-mobile urethra

② - tip test.

⊕ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$

Collagen → peri-urethral injection.

الموضوع:

الدرس:

Investigation:

① Urine Analysis + Urine culture \Rightarrow exclude UTI.

② Bladder Diary.

pt record $\left\{ \begin{array}{l} \rightarrow \text{Fluid Intake} \\ \rightarrow \# \text{ of voiding (day/night)} \\ \rightarrow \# \text{ of incontinence.} \end{array} \right\}$ مفید ہے
follow up
response
to treatment.

③ Urodynamic study

3 stages

Uroflowmetry

(Free Flow study)

look for

- ① voided volume $> 150 \text{ ml}$
- ② Flow Rate 15 ml/second
- ③ Residual volume By US $< 50 \text{ ml}$.

Filling Cystometry

look for:

- ① Filling pressure \rightarrow of bladder.
 - involuntary contraction + \uparrow Intravesicular pressure $> 15 \text{ cmH}_2\text{O}$ \rightarrow DO
 - ask pt to cough \rightarrow urine pass \rightarrow SUR

Voiding Cystometry

(pressure flow study)

• obstruction \rightarrow

Detrusor pressure $> 50 \text{ cmH}_2\text{O}$

other complex investigation

• cystourethroscopy = cystoscopy.

• Imaging study

RMI

Bladder wall thickness $> 5 \text{ mm}$ \rightarrow

Detrusor Overactivity

* if obese \rightarrow OGTT, Random blood sugar / HbA1c.

الموضوع :

الدرس :

Management :

* Any type of UI → Lifestyle modification:

↳ Fluid intake, caffeine, Alcohol, smoking, wt loss

* SUI

① Conservative

- pelvic floor muscle Training. ⇒ at least 3 month.
- Urethral device : Ring / Donut.

② Medical

Duloxetine. ↳ tight the sphincter / Antidepressant.
↳ need month to start / Nausea

③ Surgical ⇒ Defentive

① Sub-urethral tapes ↳ Trans-Vaginal Tapes TVT
↳ Trans Opturator Tapes TOT

② Colposuspension → 2 stiches at vagina → suspend it.

③ Urethral Bulking Agent



الموضوع :

الدرس :

OAB ⇒ Life style modification , pelvic floor muscle Training .

Need to complete

الموضوع :

الدرس :

Pelvi-abdominal Mass

* Age, GP, LMP.

* Analysis of mass:

Sudden or Gradual / Duration / site / Rate of Growth / Related to menstruation / come & go / pain (?) → SOCRATES.

endo-metrioma

* GI symptoms: N&V, constipation, diarrhea, Bloating

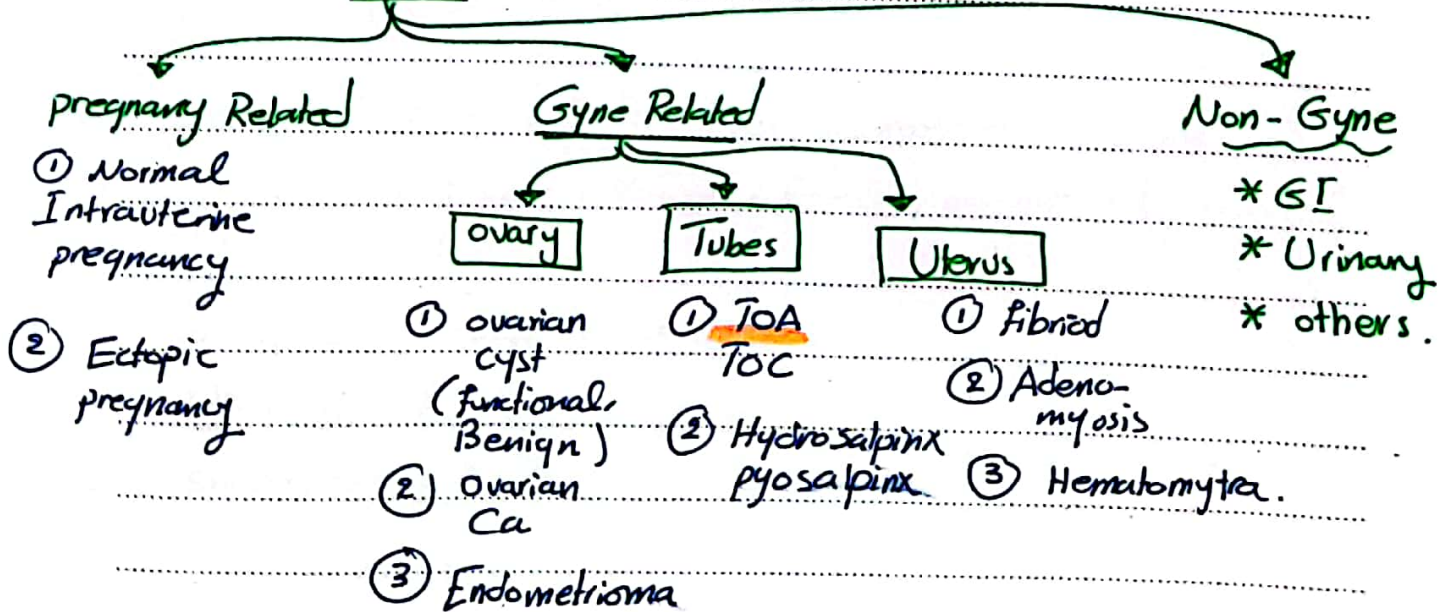
* Urinary symptoms: urgency, frequency, incontinence retention.

* Genital symptoms: amenorrhea, HMB, Discharge.

* constitutional symptoms of malignancy:

Anorexia, loss of wt, night sweating, Fever (?)

Go to DDx



الموضوع :

الدرس :

How to ask about PDX?

GI → Appendicular Abscess
Diverticulitis
colo-rectal ca.

US → pelvic kidney
Bladder diverticulum

pregnancy Related

Gyne Related

Non Gyne

ovary

tubes

Uterus

① cyst
in pre-menopausal
cyst → menopause
الكيسات البنية

② ovarian ca.
constitutional symptoms

③ Dysmenorrhea
Dyspareunia
Dyschezia
chronic pelvic pain
Infertility

① Abscess
Fever
pelvic pain
Discharge.

② Infertility.
* chronic PID.

① pressure symptoms
HMB
Infertility
Back pain

② HMB
Dysmenorrhea

③ Amenorrhea
cyclic pelvic pain.

others
lymphoma
Retro-peritoneal
Sarcoma.

① Amenorrhea (LMP)
pregnancy symptoms

② Amenorrhea
pelvic pain
vaginal bleeding
shoulder pain

* medical Hx: chronic dz, liver/pancreatic dz / hernias

ca: colon, ovary, Breast, endometrial, cervical.

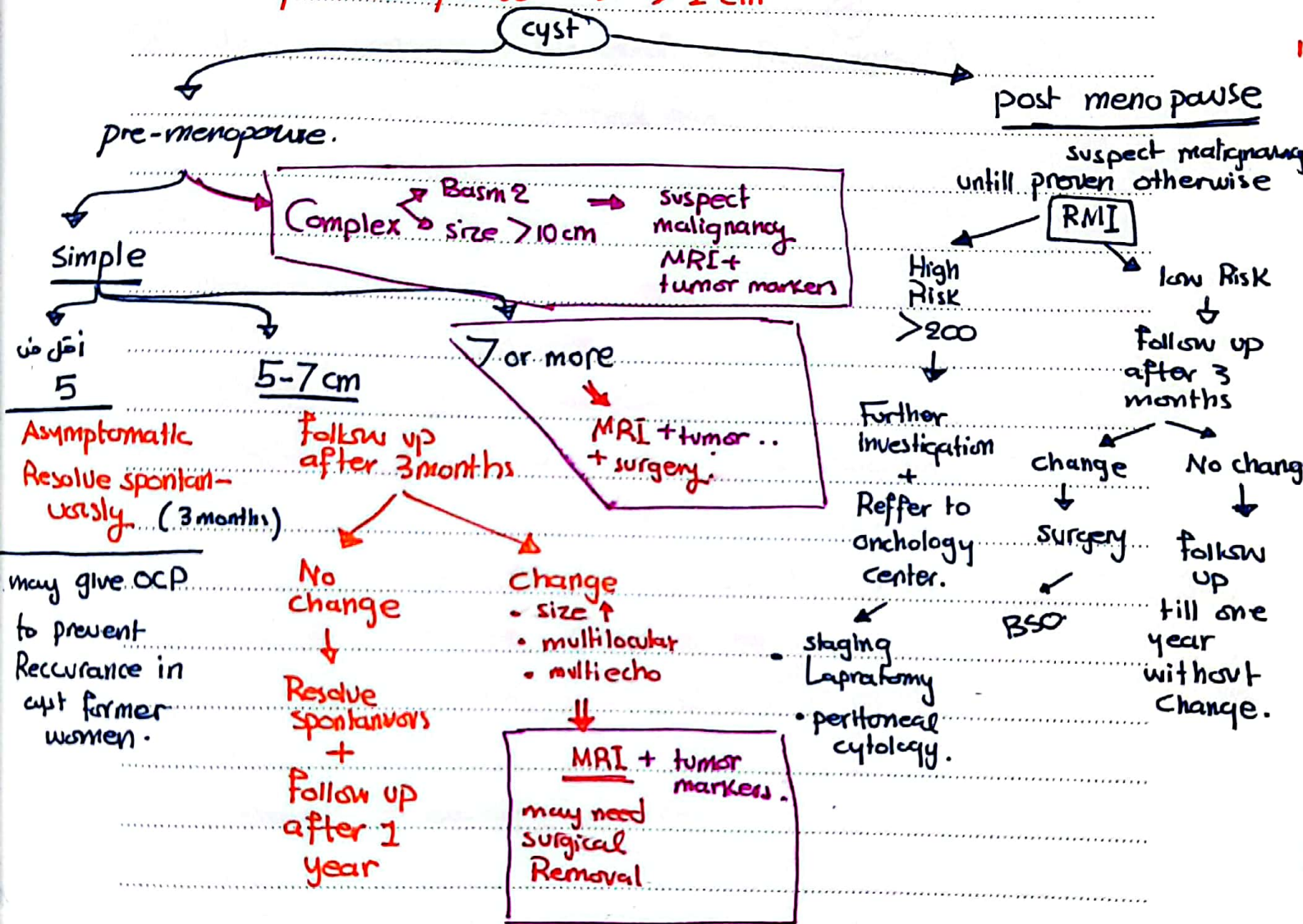
* Family Hx: same as medical

* Drug Hx: ?

* smoking / Alcohol!

Approach to ovarian cyst

- ① cyst in premenopause → > 2cm (follicle < 2cm)
in post menopause → > 1cm



Drainage
omy.

Topic:

الموضوع:

Lesson:

الدرس:

Exam of pelvic mass:

- ① vitals + BMI
- ② Abdominal exam full
- ③ pelvic (speculum + Bimanual + Rectovaginal) [?]
↓
Adnexal mass

Investigation In pelvic mass:

- ① pregnancy test \Rightarrow R/O ectopic
- ② CBC \rightarrow \uparrow WBC (infection)
- ③ KFT & LFT + serum amylase [?]
- ④ \rightarrow confirm ovarian cause $\begin{cases} \rightarrow$ US + Vascularity \\ \rightarrow Tumor markers

CA 125 + CEA, CA19.9, HCG, AFP, LDH, Inhibin

look for mets $\begin{cases} \rightarrow$ Chest x-ray \\ \rightarrow CT pelvic & Abdomin.

Management \rightarrow according to cause

TOA \rightarrow Gonorrhoea / chlamydia / E. coli / closed space (anaerobic)

① Medical \rightarrow Broad Doxycycline + Gonorrhoea Cefotetan + anaerobic Metronidazole
Oral 100 mg / 12 hours for 2 days 2g IV 500 mg IV / 8 hours.

② If not Respond to medical \rightarrow surgical Drainage
or size $>$ 8cm Colpotomy.

Infertility

couple's fertility / تخليها حالة اوسان - اها عنى
 انزيم ما خلفوا ، منوبه - اسك / منوبه اى / منوبه

check the definition of Infertility:
 Inability to conceive after 1 year of regular unprotected intercourse.

History

- pt profile** ① Age: if >35 years
 ovarian reserve ↓ in count & quality
- ② occupation: exposure Radiation → affect male and female fertility
- ③ Gravida & para: to distinguish primary or secondary infertility.

* how long trying to get pregnant? Duration of start asking about causes

Female factors: ⑥

ovarian

- ① symptoms of Hypothalamic dysfunction ↓ FSH, ↓ LH leads to anovulation
 - * low body weight BMI < 19.
 - * excessive exercise
 - * Anorexia nervosa.
 - * stress.

② Hypothyroidism symptoms:

- * cold intolerance
- * wt gain
- * constipation
- * Fatigue
- * Brady cardia
- * impaired memory

كثير
 حرق مفرط في مكانه
 جفاف في العينين
 جفاف في الفم

③ Hyper-prolactinemia

- * Amenorrhea / Irregular cycles.
- * Galactorrhea
- * Visual disturbance (if macroadenoma compress optic chiasm)

④ PCOS

- * amenorrhea / oligomenorrhea
- * hirsutism / acne / balding
- * obesity
- * acanthosis nigricans (why/most PCOS → obesity, ↑ leptin, ↑ insulin resistance)
- skin hyperpigmentation, armpits & neck

⑤ premature ovarian insufficiency

- * hot flashes
- * vaginal dryness
- * night sweating.

⑥ Drugs affect ovulation

- * Antipsychotic
- * NSAIDs

Adhesion تفرى به صدار عنك
 دالتى من اسباب

Tubal

- ① PID symptoms,
 - * pain (lower abdominal)
 - * fever
 - * Dysuria
- ② Surgeries in abdomen or pelvis?
- ③ Hx of ectopic pregnancy?
- ④ endometriosis
 - * Dysmenorrhea
 - * Dyspareunia
 - * Dyschezia.
- ⑤ Tubal ligation.

Uterine

- ① submucosal Fibroids (affect implantation)
 - * heavy / prolonged bleeding
 - * urinary Retention / constipation
 - * lower back pain
- ② Hx of uterine abnormalities (septum)
- ③ Hx of D&C or evacuation → if aggressive Induce Asherman syndrome (intrauterine adhesion)

cervix

- ① Infection (HPV) → vaginal discharge
- ② procedure → cone biopsy, cryosurgery
- ③ Trauma → Hx of trauma / Instrumental deliveries.

Remember ② infections → HPV
 → STD (Chlamydia Gonorrhoea)

④ STD → PID → tubal adhesion

Investigation

if she do any investigation? Results?
 Laparoscopy, Hysteroscopy, HSG, hormonal Inv, pap smear

Male factor ③

- * testicular surgery (varicocele, Testicular Torsion, malignancy)
- * Trauma
- * infection (STD, Mumps)
- * Hx of congenital defect
- * Hx of sterilization
- * undescended testes
- * pregnancies with previous partners.

④ impot

- * if he has sexual dysfunction / what's the nature of it: change in libido
 - impotence
 - erectile dysfunction
 - premature ejaculation
 - pain during erection / ejaculation

causes of azoospermia

أسباب العجز الجنسي

Drugs : Sulfasalazine (affect sperm anabolic Steroids quality) Chemotherapy Cimitidine

Toxins : Hx of exposure to environmental toxins:

- * Excessive heat
- * Radiation
- * chemicals : heavy metals
- * smoking , Alcohol

Medical Problems

- * DM
- * COPD
- * RF
- * HF
- * hemochromatosis
- * cystic fibrosis

Klinefelter syndrome → Gynecomastia ↓ facial hair ↓ libido

sexual Hx

- * How many times sexual intercourse per week?
- * at time of ovulation
- * do you use lubricant (could be spermicidal)
- * Difficulties in intercourse → dyspareunia, impotence, vaginismus

past obst.

Any previous pregnancy? (miscarriage, stillbirth, live) MOD? complication?
↳ Duration
↳ US finding.

past gyne

* menstrual Hx → menarche (age) Regular, amount, frequency, Length. LMB
* IMB
* contraception

past Medical & surgical

Family Hx

↳ infertility or birth defects?

Social Hx

- * smoking * Alcohol * caffeine.
- * living condition.

Physical exam

vitals + BMI
↳ < 19 → Hypothalamic dysfunction
↳ > 30 → longer time to conceive

Female exam

Breast exam : • Breast development • Galactorrhea

Abdomin : • mass.

Ovary → PCOS signs → hirsutism / balding, acne ↑ prolactin → galactorrhea, visual field defect

tubes → PID → pelvic tenderness surgery → scars.

uterus → fibroid → pelvic mass Irregular uterus.

cervix → cervicitis → motion tenderness POI → atrophic cervix & vagina

- secondary sexual characteristics
- signs of androgen excess.

- 1) Hypertrichosis
- 2) Hirsutism / acne
- 3) Deepening of voice
- 4) ambiguous genitalia

Male exam

- secondary sexual characteristics
- structure of external genitalia
- varicocele
- Inguinal hernia

Testes → absent / undersized ↳ mass ↳ tenderness → infection

Work up / Investigation

① Semin fluid analysis

- * if abnormal → repeat it
- * normal values:
 - cp v/v mm
 - Volume → 1.5 ml or more
 - vitality → 58% or more
 - motility → 40% or more
 - morphology → 4% or more (normal form)
 - Concentration → 15 million or more
 - PH → 7.2 or more

② Ovarian reserve

- 1 Anti mullerian Hormone AMH
- 2 Antral follicle Count AFC

Ovulation

- 1 Hx of Regular cycles
- 2 Mid Luteal progesterone.

③ screen for Rubella

- infection → severe malformation.
- not vaccinated → give vaccine
- get pregnant after 1 month

④ screen for Chlamydia Trachomatis

- infection → adhesion → hydrosalpinx
- vulvar swab.

⑤ pap smear.

⑥ TSH

⑦ Prabactin

→ Irregular cycles

IVF complication

- ① side effect of medication → headache
- ② Multiple pregnancy
- ③ ectopic pregnancy
- ④ OHSS
 - ↳ high Risk
 - ↳ PCOS
 - ↳ low # of follicle
 - ↳ low BMI

⑧ Tubal patency & Anatomy of uterine Cavity:

1 Hysterosalpingiography HSG

(dye) + x-ray.
↳ urografin or lipidol

2 Hysterosalpingo - contrast - sonography contrast + US

3 Laproscopy → diagnostic

- endometriosis
- Adhesion
- tubal patency
- Remember Methylene blue
- Hydrosalpinx.

→ therapeutic

- Laprosopic ovarian Drilling
- myomectomy
- tubal surgery.

4 Hysteroscopy

- if failed repeated IVF
- ↳ therapeutic
- Intra uterine septum

IVI

Indication

- ① couple unable to have vaginal intercourse
- ② HIV

don't offer

- ① unexplained infertility
- ② low sperm count or quality
- ③ mild endometriosis.

الفكرة: فائدة محدودة بالحيوي
انخفاض استقام
IVI

ICSI

- ① low number of sperm
- ② severe teratospermia
- ③ Failure of previous IVF

IVF

- ① Failure to conceive after 2 years of Regular unprotected intercourse
- ② Failed 2 cycle of artificial Insemination (6 of them are IVI)

APH

History

pt profile :-

Age (Advanced age → Risk factor for both P.P & PA)

Gravidity & Para → Primigravida → PA
 Multiparous → PP

LMP (to calculate GA) *multi ← 2 جلد افسوس*

Blood Group + Rh.

Analysis of bleeding

Duration, Amount, Color, *previous episodes of bleeding*
 (Fresh → PP, Dark → PA)

Bleeding from other sites (PIH) → Abruption
 → DIC

- * Is it Provoked by Trauma (PA)
- * Is it Provoked by PV exam or Intercourse (PP)

Abdominal pain → continuous / Localized *US signs*
 painful → PA, uterine Rupture
 painless → PP, Vasa previa.

Uterine Contraction → PA may stimulate Labor to begin

Liquor passage → Analysis of Amount, color, smell
 Fever?

Fetal Movement

Anemia symptoms :- Dizziness, LOC, SOB, palpitation, Oliguria.

previous US finding

single Multiple (Risk factor for PP, PA)
 position of placenta
 fetal malpresentation (associated with PP)
 Date by scan?

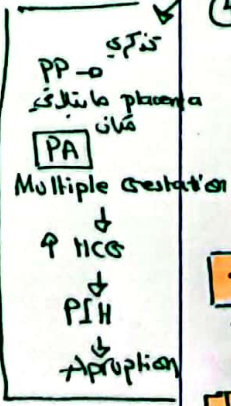
Drugs (anticoagulant)

Smoking (Risk factor for PP, PA)

Cocaine Use (parent VC → PA)

Family Hx

PP, PA, HTN, Bleeding disorder.



Going to DDX and its Risk factors.

Obstetric Causes (4)

Placental Abruption

- 1 previous placental Abruption
- 2 Trauma / ECU ?
- 3 chronic HTN or pre-eclampsia
- 4 polyhydramnios with sudden ROM.
- 5 Advanced age / PG / Multiple Gestation smoking / cocaine

- 1 continuous Localized pain
- 2 Dark or No Vaginal bleeding (concealed)
- 3 Uterine contraction

placenta Previa

- 1 previous PP
- 2 previous Uterine scars: CS / Myomectomy / D&C
- 3 Advanced age / Multiparity
- 4 smoking / Multiple Gestation

Vasa Previa ⇒ need doppler US

- 1 Velamentous cord insertion ?
- 2 Accessory placental Lobe ?
- 3 Multiple Gestation
- 4 IVF.

Triad to diagnose

- 1 Rupture of Membrane
- 2 painless Vaginal bleeding
- 3 severe fetal distress / Bradycardia.

Uterine Rupture

- 1 previous uterine Rupture
- 2 previous uterine surgeries
- 3 Malpresentation / Macrosomia (overdistention)
- 4 Trauma.

- 1 Abnormal CG
- 2 Loss of station
- 3 Abdominal pain between contractions.
- 4 Loss of uterine contraction.

Systemic Causes

Bleeding disorder (easy bruising, mucosal bleeding)

Local causes

like about previous pap smears ?

- 1 Vaginal / cervical Laceration ⇒
- 2 Infection (vaginal / cervicitis) → Vaginal Discharge
- 3 Cervical ectropion.
 post coital bleeding / pain (Dysparunia.
 excessive mucus discharge (normal color / odor)

After Hx → Next step → **physical exam**

① General look + Vital signs + signs of anemia (BP, RR, PR, Temp) (pallor, ..)

Heart Rate is more important than BP.

Because Hypotension of shock may be masked by Hypertension that cause Abruption

② Abdominal exam. yes → PA

① Tenderness in uterus → No → PP

② Symphysis Fundal Height Large for GA in concealed PA

③ Leopolds maneuvers. زودي what's the presenting part? in PP → mostly non cephalic what's the lie? → malpresentation / PP

④ Auscult Fetal Heart Rate.

③ Speculum to exclude Local causes
 Assess the bleeding (Inspect pad)
 I won't do PV unless doing US
 & Localize position of placenta.

By this I finish exam going to **Investigation**

- ① US
- ① Localize placenta & exclud PP
 - ② Fetal Heart is present?
 - ③ Retroplacental Hematoma (concealed PA)
 - ④ confirm GA / Liqor.

② CTG if > 26 weeks (P)

Management

- * Assess ABC
- * Resuscitation (P)
- * 2 IV Lines
- * take Blood ⇒ CBC, Blood Grouping cross matching, KFT, LFT, Fibrinogen concentration (DIC)

كبي ما، **Kleihauer-Betke test** (to decide amount of Anti D - Rh[⊖])

- * Give Steroids
- Give Anti-D if indicated.

لازم اجاب سؤاليه ؟

Am I going to terminate ?

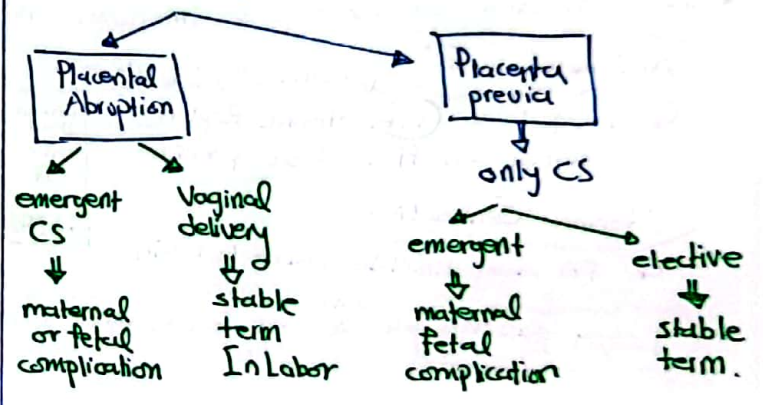
- yes** if
- ① In Labor
 - ② Maternal or fetal Jeopardy
 - ③ Term.

shock (Tachycardia ↓ BP)
 Bradycardia
 Repetitive Late deceleration

No preterm + stable mother & fetus.
 conservative + steroids.

How to terminate? السؤاليه الثانيه

According to cause of APH.



Vasa previa
 emergent CS.

Uterine Rupture
 Uterine Repair
 Hysterectomy.

Observe for PPH

Complications

Placental Abruption

- ① Hypovolemic shock
- ② Acute Renal failure
- ③ DIC (remember P[~~H~~] → DIC)
- ④ PPH
- ⑤ Anemia & Blood transfusion.

Placenta Previa

- ① Abnormal placentation (placenta accreta spectrum)
- ② PPH

Uterine Rupture

- ① Maternal Death

* placenta previa low lying placenta after 28 weeks repeat US at 32 week to confirm dx

maternal

فكرى صلاه
فقدت دم لثمن

Fetal

- For ~~PPA~~ PA + Vasa previa
- ① IUGR
 - ② Hypoxia
 - ③ IUFD
 - ④ premature Delivery

Fetal

- ① IUGR
- ② Hypoxia
- ③ IUFD
- ④ premature delivery
- ⑤ Malpresentation

Fetal death.

PROM = Pre-Labor Rupture of Membrane (term / not in Labor)
PPROM → **Preterm** prelabor ROM (preterm / not in Labor)

History α. Gush of fluid per vagina or Discharge from vagina.

Pt profile → **Age** (extremes are Risk factor of PROM)
 → LMP, GA
 → Gravida, para.

Analysis of α.

- ① Gush of fluid followed by continuous dripping
- ② Duration of this Leakage
- ③ Amount
- ④ color
 - clear
 - blood stained PROM with placental Abruption
 - Dark green Meconium → so fetal distress
 - yellow → urine?
- ⑤ odor
 - ammonia → urine
 - sweet → amniotic fluid.
- ⑥ previous episodes.

associated:

- ① **painful** or **painless** vaginal bleeding
 ↓ placental Abruption or PP with PROM.
- ② Sexual intercourse → Ascending Infection
 Risk factor for PROM
- ③ Fetal movement
- ④ Uterine contraction (is she in labor)
- ⑤ Urinary symptoms → ① DDX → urine incontinence, urgency, dysuria
 ② Ascending infection is risk factor for PROM.
 Fever, Incontinence
- ⑥ Itching + Redness at Vulva

Risk factors of PROM

- ① previous Hx of PROM, PTL
- ② Over distension
 - Multiple gestation
 - polyhydramnios
 - Macrosomia
- ③ Ascending Infection.
- ④ pregnancy Induced HTN → placental Abruption
- ⑤ Trauma
- ⑥ smoking / Intercourse / Age Extremes

DDx

- ① PROM
- ② Urine Incontinence
- ③ Vaginal Infection
- ④ Leukorrhoea

Smoking
 drugs

Hx a/c

Family Hx of PROM / PTL

PE General Look

- ① Vital signs, BMI (low / High wt → Risk factor for PROM)
 - Fever + Tachycardia (Ascending infection as Risk factor chorioamnionitis as complication)
- ② Abdominal exam
 - ① Abdominal tenderness → chorioamnionitis
 - ② SFH → small for GA → oligohydramnios
 - ③ Leopold maneuver → Lie, presenting part
 - Auscult fetal heart → Tachy → chorioamnionitis.
- ③ Speculum
 - ⊕ pooling in posterior fornix of Vagina
 - ⊕ cough test → fluid comes from vagina
 - Dilatation of cervix
 - cord prolapse

By looking not by PV

Don't Do PV → ↑ risk of Infection

Investigation

- ① Nitrazine test ⇒ Amniotic fluid is Alkaline
 ← تتحول الورقة للون الأزرق
 False positive 15%.
 ↳ urine, Blood, semen ⇒ all are Alkaline
- ② Ferning test → secretion on slide
 ← فرس
 False positive 10%.
 ↳ could be infection not amniotic fluid
- ③ Amnisure
 specific 100%.
 • Look for PAMG1 = placental alpha Microglobulin 1. (protein)
 • Insulin Growth factor Binding protein 1.
- ④ High vaginal swab → Group B streptococcus
 DDX = Bacterial Vaginosis. ↓
- ⑤ US ⇒ oligohydramnios
 ← كميته قليل
- ⑥ **CTG**

clindamycin

Management

pre-term

- ① Admission to hospital
- ② Give Antibiotics (prophylactic)

Erythromycin for 10 days

500 mg 1*3 (oral)

- ③ Steroids

Dexamethazone 12 mg x2

12 hours apart

(IM)

Between (24 - 34+6)

حرف S
سببه رقم 2

time for steroid in PPRM.

When to terminate?

- ① As Reach 36 week
- ② If Maternal or fetal complication
- ③ In labor.

How to terminate? IOL

term more than 36 → PROM

Expectant
60%
wait for
24 hours
60% goes in
spontaneous
Delivery after
PROM

بین
خواب

Immediate IOL

- less hospitalization
- Less perinatal infection
- Less neonatal morbidity

Always Monitor for

Chorioamnionitis

↳ preterm
↳ term.

① C-Reactive protein + WBC count

② clinical ⇒ Abd. tenderness
Fever
Vaginal discharge
Fatigue
↓ fetal movement

③ Fetal Tachycardia > 160.

Steroid

- ↓ Intrauterine Hemorrhage
- ↓ RDS
- ↓ Necrotizing enterocolitis
- ↓ NICU admission
- ↓ Neonatal death

مناخوت
لحمت


No Recommendation for Repeating steroids
No Recommendation to Tocolytics in PROM

PROM complications.

- ① chorioamnionitis
- ② cord prolapse
- ③ preterm Delivery
- ④ placental Abruption
- ⑤ Fetal Distress & Deformities
(facial & skeletal)

Hyperemesis Gravidarum

excessive vomiting associated with: \uparrow H_2O loss

- 1) wt loss 5% (from the pre-pregnancy wt)
- 2) Dehydration
- 3) Electrolyte Imbalance
- 4) Ketosis. (in urine)

History

pt profile:

Age + parity \rightarrow common in young + primi

c.c: excessive N&V

Analysis

- 1) Onset: HEG start in **First trimester** 5-6 weeks
peak at 9 weeks
end by 20 weeks.
- 2) How many times do you vomit
- 3) Is it related to food, **medication**, stress?
(Triggers) \rightarrow Ion
 \rightarrow opioids.

complication

- 1) Dehydration: Feeling thirsty, Dry eyes, lips, mouth
Headache
- 2) electrolyte imbalance
 \downarrow Na^+ \rightarrow Lethargy, Headache, confusion, seizure
 \downarrow K^+ \rightarrow muscle weakness, cardiac arrhythmias.
- 3) Thyrotoxicosis (HCG mimic TSH \rightarrow \uparrow T_3, T_4)
heat intolerance, tremors, sweating

Risk factors

- * previous history of HEG
- * Family Hx of HEG
- * current Multiple pregnancy / GTD?
- * pregnancy induced HTN?

DDx

1) Neurological & psychological causes

Migraine: throbbing like pain
(beating)

Eating disorder

2) GU system

- Gastroenteritis: Abdominal pain, diarrhea
- pancreatitis: pain radiate to back
- Hepatitis: Jaundice, IV drug use
- PUD: Heartburn.

3) GU system:

- UTI or pyelonephritis:
Dysuria, Urgency, Frequency
Fever, Flank pain.
- Kidney stones
Loin pain.

4) Metabolic

- DKA \rightarrow Are you diabetic / take Insulin?
- Hypertthyroidism \rightarrow Heat intolerance
sweating
tremors.

physical exam

- * Vitals \rightarrow Hypotension \rightarrow Dehydration
General \rightarrow signs of Dehydration: sunken eyes.
BMI \rightarrow wt loss?
- Abdominal \rightarrow fundal Height \rightarrow Large for GA
if multiple pregnancy.
- Bimanual \rightarrow Adnexal mass if molar.

Approach

- 1) Rule out other causes.
(Multiple, Molar, GI, GU, Metabolic...)
- 2) Decide if to treat pt as inpatient or outpt
How?
 - If can tolerate oral intake
 - If improve with oral medication
 - if No electrolyte imbalanceout pt.

how to manage out pt ?

- 1) Ginger JJ
- 2) Vitamin B6 (pyridoxine)

How to manage Inpatient

Investigation

- 1) cBc \rightarrow WBC \rightarrow Infection
 \rightarrow Hct \rightarrow increased due to fluid loss
- 2) Electrolyte \rightarrow \downarrow Na^+ , \downarrow K^+ * TFT
- 3) Liver function test (\uparrow ALT, AST if sever HEG)
- 4) UA \rightarrow exclude UTI, No chloride in urine (loss HCL by vomiting)
- 5) Blood glucose \rightarrow exclude DKA.
- 6) US \rightarrow Viable?
 \rightarrow GA
 \rightarrow Multiple
 \rightarrow Molar.

Biochemical
thyrotoxicosis
by HEG

علامات
* small frequent meals
* decrease fat
* \uparrow carbs
* No water on empty stomach.

Inpatient

- ① Admission + NPO
- ② IV Fluids → Normal saline
1 Liter every 8 hours
→ Maintenance

③ correct electrolyte

Add KCl to normal saline

Maintenance 20-40 mEq / L of normal saline

Deficit ?

- ④ **Thiamine** → to prevent Wernicke's encephalopathy
Vit B1

- ▲ Ataxia
- Confusion
- Ophthalmoplegia.

⑤ Antiemetics (IV)

First line

Histamine 1 antagonist: **Cyclizine**
50 mg / 8 hours.

Second line

Dopamine antagonist: **Metoclopramide**
5 days maximum → 10 mg / 8 hours.
Extrapyramidal side effect. **Domperidone**
60 mg / 8 hours.

Third line

Serotonine antagonist: **Ondansetron**
8 mg / 12 hours

or

Corticosteroids

* you can combine drugs if no improvement

Last line

Termination:

- ⑥ prophylaxis of **VTE**
- ⑦ treat co-existing **GERD** → PPI
→ H₂ Antagonist

* Don't give dextrose ⇒ glucose oxidation consume more thiamine.

Complication of Hyper-emesis.

Fetal

- ① IUGR / small for GA.
- ② preterm Delivery

Maternal

- ① Hyponatremia
- ② Hypokalemia → loss Cl⁻ → loss H⁺
- ③ Hypochloremic metabolic Alkalosis
- ④ Thiamine deficiency → Wernicke's encephalopathy
- ⑤ Thyrotoxicosis
- ⑥ Mallory - Weiss tear of esophagus.
- ⑦ VTE

puerperal pyrexia.

temperature 38° or more after 24 h of delivery persist till end of puerperium.

c.c. ⇒ **Fever**, generalized weakness or offensive vaginal discharge.

• هون تكون فترة puerperum مريضه مياة مياة

History

Pt: Age, Gravida, para

C.c. documented fever? By which route? How much?

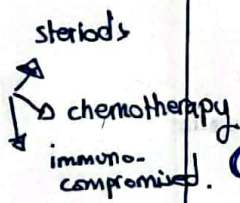
Looking for source of infection

By Hx

- Respiratory Tract Infection / chest infection
chest pain, cough, SOB
- Breast engorgement or Mastitis
mastalgia (pain), swelling, nipple discharge, trauma.
- Wound infection (whether CS or episiotomy)
pain at site of wound, discharge, redness.
- puerperal sepsis** ⇒ foul smelling discharge
Lower abdominal pain (endometritis)

Risk factors of puerperal sepsis

- prolonged labor
 - prolonged PROM
 - Instrumental delivery / tears
 - Retained products of conception
- Urinary tract infection: Dysuria, Urgency, Frequency.
was placenta complete?
 - Deep Venous thrombosis.
painful swollen calf?
 - systemic Risk factor
Anemia, DM, ↓ immunity
Ask about
 - wound packing for abscess
 - wait closure By secondary Intention.



PE

ملاحظات

- General:
 - Vitals → Fever, Tachycardia
 - Dehydration: sunken eyes
- chest exam ⇒ Auscult basal crepitation
- Breast exam ⇒ tenderness, swelling, discharge
- Abdominal exam
 - tenderness → endometritis of puerperal sepsis, UTI
 - if wound → inflammation around it
- PV → jumping sign if puerperal sepsis → parametritis.
- Lower limb exam. → tenderness / swelling white?

Investigation

- CBC → ↑WBC, CRP, ESR } General.
- Blood culture + sensitivity
- chest X-ray + sputum culture
- US → Looking for Retained products of conception → that causes puerperal sepsis.
- wound swab
- High vaginal swab
- UA + urine culture + sensitivity
- Doppler US (DVT)

Management

Accordingly to cause.

- wound infection** → admission
 - wound discharge swab → culture + sensitivity
 - drainage / cleaning
 - IV antibiotics / Broad spectrum / may add topical
 - IV analgesics.
 - IV antipyretics.

periperal sepsis

* Admission

IV (Fluids, analgesics, antipyretics)

IV antibiotics → broad spectrum

• gentamycin (-)

(+) • 3rd cephalosporins

anerobics

• Metronidazole

→ if develop

• septic thrombophlebitis

→ IV heparin 10 days.

→ Immobilization

• Retained product

→ ergometrine

→ D&C

Mastitis

→ oral cloxacillin

→ can breast feed (✓)

→ do Breast US to exclude
Abscess. (if not respond)

Chronic DM

سكري DM مزمن

* effect of pregnancy on DM

- Increase Insulin Requirement
 (pregnancy) → Human placental Lactogen
 → cortisol
 → progesterone
 → Insulinase enzyme
 النتيجة استهلاك قليل في الحمل

- Deterioration in Diabetic Retinopathy, Neuropathy, Nephros.
- DKA ↑
- Hypoglycemia → زيادة استهلاك الجلوكوز

effect of DM on 1 Mother pregnant (اكثر كمنح)

- ↑ miscarriage / ↑ PTL / ↑ PROM
- ↑ pre-eclampsia
- ↑ Infection → vaginal candidiasis, UTI, wound infection
- ↑ CS

2 fetus (اكثر كمنح)

- congenital anomalies. → VSD, NTD (sacral agenesis)
- Macroemia & polyhydramnios
- polycythemia & Hyperbilirubinemia
- IUGR

Preconception Counseling / Booking visit.

- HbA1c → should be < 6.5 to get pregnant
 > 8 → CI → ↑ congenital anomalies
- Monitor Glucose Reading at home
 4 times daily → fasting
 → 2 hours after meals
 مراقبة سكر الدم في البيت
- Modify ANC visit to become closer.
- Screen or follow up for expected complication: (multiple specialists)
 - Retinopathy / nephropathy
 - HTN & CVD
 - Thyroid (Hypo)
 - Hypoglycemia → Fainting?

5 counsel about possible complication

- congenital anomalies, Macrosomia
 - Miscarriage / PTL / PROM / CS
 - pre-eclampsia
- Do Detailed anomaly scan + US + Assessment of fetal wellbeing

6 Diet

- ↓ carbohydrate
- ↑ Fibers.
- Small snack between meals
- exercise, ↓ wt.

7 Medication.

- stop teratogenic medication.
- (Both Insulin & metformin → Category B not teratogenic)
- High dose of folic acid 4 mg / day
- continue on metformin (if was on it)
- can switch to insulin during pregnancy if > 200 mg/dL.
- * half to half (short acting + intermediate acting)

target Blood Glucose

Fasting < 5 mmol/L

2 hours < 7 mmol/L

first trimester second third.

↑ insulin dose → 0.6 * weight → 0.7 * wt → 0.8 * wt
 → can breastfeed with Insulin or metformin -
 → after delivery → go back to Pre-pregnancy dose

Contraindication of pregnancy with chronic DM

- HbA1c > 8
- Ischemic heart dz
- Untreated proliferative Retinopathy
- Severe Renal Impairment creatinine > 250 mmol/L.

Examination:

- vitals → BP ↑ & BMI
- Funduscopy by optalmologist + US → FHR
- thyroid exam (enlarged?)
- chest auscultation (cardiac and lung) check
- sensation / tremor / hypo - hyper Reflexia.

Labs

- HbA1c KFT
- GFR / Creatinine / Urine albumin / Creatine Ratio. pre-eclampsia / proteinuria
- TSH / LFT

Gestational DM

onset 24-28 weeks / due to anti-insulin hormones

نفس الى صحت
نفس الى صحت

Risk factors for GDM

- ① previous GDM
- ② Age > 25
- ③ BMI > 25
- ④ Family Hx of DM in First degree Relative
- ⑤ previous Macrosomic ≥ 4 kg
- ⑥ previous polyhydramnios.

نفس
نفس
نفس

Maternal complication

- ① Increase Risk of DM type 2 (40-60%) within 10-15 years
- ② ↑ risk of Hypertensive disorder
- ③ ↑ risk of CS & Instrumental delivery

النفس
نفس

Fetal complication

- ① Macrosomia > 4 kg
- ② ↑ CS, Instrumental & Birth Trauma
- ③ Neonatal Hypoglycemia, polycythemia, Hyperbilirubinemia
- ④ ↑ risk of DM type 2 & obesity in life.

Brachial plexus injury
↑ clavicular fracture.

No Risk for congenital anomalies as organogenesis occurs at first 12 weeks

In Booking Visit

① Assess if pt **high risk** for GDM

- Age > 25 BMI > 25.
- ethnicity → Asian + Indian
- **previous** GDM
Macrosomic babies > 4kg
polyhydramnios.
- **IUIFID**
Recurrent miscarriages.
- Family Hx of **DM** in First degree Relatives.
- current pre-eclampsia or HTN
- **PCOS** (↓ insulin sensitivity)
recurrent vaginal candidiasis.

② symptoms → polyuria, polydipsia, polyphagia

③ Known Case of DM? **which type?** For How long?

④ Last Blood glucose Reading?

⑤ Last HbA1c reading?

⑥ Monitoring ⑦ Medication.

⑧ Any complication

نفس قبل

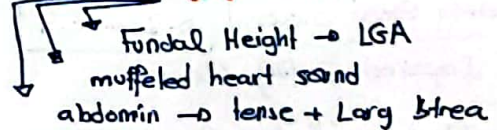
⑨ Drug Hx (teratogenic medication).

⑩ smoking. ⑪ medical/surgical Hx. (CS)

physical exam

① vitals ↑BP, BMI, (FHR)

② Abdomin → polyhydramnios



③ perineum → discharge → ↑ infection

premature opening of cervical os → PTL.

* if high risk → screening in booking visit and (24-28) weeks

* if low Risk → 24-28 weeks.

Screening

1 hour →

Oral Glucose intolerance test 50 gm

140 mg/dL or more → positive

if negative nothing to do.

Go to Diagnostic

Diagnostic test

1 One step approach → fasting women + 75 gm 2HOGTT

Fasting Glucose ≥ 92 ≥ 7

1 hour ≥ 180

2 hour ≥ 153 ≥ 111
mg/dL mmol/L

to make diagnosis → At least one reading (+)

2 two step approach → Not fasting women.

First step 50g 1HOGTT

if 140 or more → positive go to second step.

Second step 100g 3H OGTT

Fasting Glucose ≥ 95

1 hour ≥ 180

2 hour ≥ 155

3 hour ≥ 140
mg/dL.

to make diagnosis → At least 2 or more.

Goal → Fasting Blood glucose < 6 mmol/L Mx

if Fasting Blood Glucose 6.1 - 6.9

Impaired fasting Glucose:

* Diet modification & exercise
Daily monitoring (4 times Reading)

* Metformin and $\begin{cases} \text{still not controlled} \\ 6.1 - 6.9 \\ \text{No complication.} \end{cases}$

Once ① Fasting Blood Glucose 7 or more

② Any complication

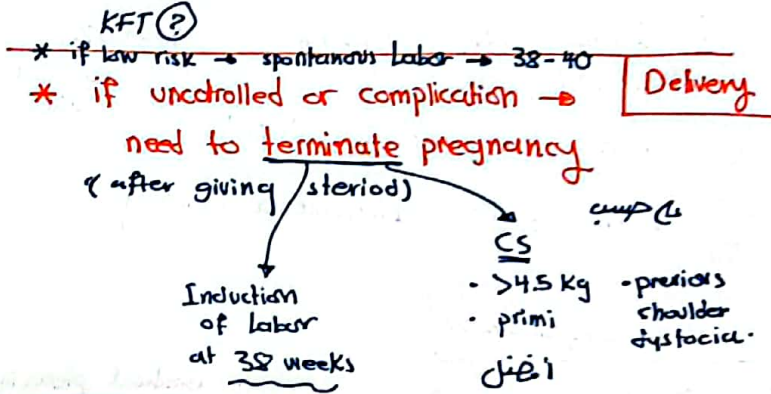
* start Insulin.

Adjust insulin dose

- 1 trimester 0.6 * wt
- 2 trimester 0.7 * wt
- 3 trimester 0.8 * wt.

إدارة مرض السكري في الحمل
Management of Diabetes

- * Diet modification & exercise always important
Medication في وقت الحاجة
- * Counsel the pt about GDM complication on Mother, fetus, Neonate
- * Monitor Glucose Reading at home 4 times daily.
- * Regular follow up:
US → evaluate fetal development
CTG → every week → after 32 weeks.
UA → proteinuria?



Intrapartum Mx

- * continuous CG
- * sugar reading → every hours → and put in Sliding scale of Insulin.
- was not on insulin → give only sliding scale
- was on insulin → Goal (4-7) mmol/L
give insulin & dextrose to achieve goal

Post partum

- * stop medication.
- * sugar reading 3 days → Goal 5-9 mmol/L
- * follow up for 3 month (?)
→ Repeat OGTT & HbA1c