





مسم الله الرحمن الرحيم

نضع بين أيديكم نحن **لجنة الطب والجراحة** جهودنا المبذولة في صياغة النسخة الاولى **(2019)** من **تبييض راوندات النسائية**.

ولأن من لا يشكر الناس لا يشكر الله، نتقدم الشكر لجميع الزملاء الذين ساهموا في جمع هذه المادة ...

ساجدة ذنبيات ، آية زيدان ، أحمد ابو الفتوح ، غفران عطيات ، سندس نصّار ، أسهاء قاسم

تنسيق : الفريق الأكاديمي – لجنة الطب والجراحة 🔵

عبدالرحمن الوردات ،محند الخزاعلة، طارق أبو لبدة

ملاحظة : نترقب بإهتمام تغذيتكم الراجعة لنطوّر معاً هذا العمل ..

Table of contents

Doctor name	Round Topic	Page
Dr. Omar Aldabbas	PROM, Chorioamnionitis	5
	Management of Pre-eclampsia	7
	Polyhydramnios, True/False labor	8
	Pre-eclampsia	10
	Fetal movement, Pap smear, AUB	13
	PROM, Examination, CTG	15
	Anesthesia, ectopic, AUB	21
Dr. Seham	C/S History, infertility	24
	AUB, PCOS, Infertility	26
	Polyhydramnios, GDM	29
	miscarriage	34
Dr. Malik	NVD, Coagulation, PE, case induction, PV	37
	Ante-natal visit , NVD, Post-partum care	40
	Pre-eclampsia, Pyrexia, Cases	45

Dr. Adel	Recurrent miscarriage	49
	GDM	51
Dr. Ahlam	Hx, Ex of PROM, Thrombocytopenia	56
	Hx taking, Ex, placenta previa	61
Dr. M. Khader	Miscarriage	66
Dr. Amal barakat	infertility	69

Dr. Omar

- Lie & presentation at 29 weeks with/without ROM we cant assess themwhy? →
 - 7- Fetal parts are small to be felt
 - 8- Uterine wall is thicker
- # Case of ROM : ROM pt came to ER , what would you do ?

1- detailed Hx : mainly for watery discharge

Amount, onset, odor, color, freq, Associated symptoms such as pain, bleeding Exposed to trauma, infection Hx of previous preg. With ROM

2- P.E : # general vitals



H.R

R.R

Temp

chorioamnionitis

Abdominal Ex for tenderness

No PV examination !! (Îrisk for chorioamnionitis)

put pt in lithotomy position + empty bladder and apply sterile

Speculum for :

- a- Inspection
- b- Cough and pooling sign
- c- High vaginal swab
- d- Assess amniotic fluid
- e- Check fetal well being with CTG and check EFW
- f- Detect lung maturity using PG (phosphodiglycerol)

g- Nitrazine test

- 9- Management :
 - a- Admission

→ CBC → WBC → chorioamnionitis

b- Follow up

CRP & ESR twice weekly

c- Give dexamethasone

((اهم شي انه ما يحصل عندنا chorioamnionitis))

- ** we deliver if :
 - 1- 34/36 weeks if there is NO chorioamnionitis (الجايدلاينز بتحكي انه نولد عال 34 لكن هون) الجايدلاينز بتحكي انه نولد عال 36 اسبوع
 - 2- Immediate delivery if Chorioamnionitis S&S are present!

Keep the patient hospitalized as long as she stable till delivery time

Done by : Ahmad Abu-Alftuh

Dr. Omar

- Management of Pre-eclampsia
 - 1- I.V Hydralazine (central Blood Pressure) Target Blood Pressure → MAP < 15 mm/Hg
 - 2- MgSo4

(Prophylaxis of seizure)

- 3- I.V fluid
- 4- Foley's catheter (Urine output) Why?
 - A) ATN (acute tubular necrosis) as a complication of PET
 - B) Side effect of MgSo4
- 5- Check :
 - A) Vital signs (most important is RR)
 - B) Reflexes (MgSo4 toxicity)
 - C) Mg level
- 6- Prompt delivery.

After delivery ?

- 1-Patient remain on MgSo4
- 2- Monitor Urine output

وأي مريضة كان عندها PET لازم تضل 4 ايام بعد الولادة

Due to shooting of Blood Pressure <u>3-4 days</u> Postpartum due to <u>Aldosterone surge!</u>

Done by : Ayah AlRameni

Dr. Omar

- Causes of Plyhydramnios :
 - 1- Idiopathic → most common (60% dr.omar 75% dr.malik)
 - 2- <u>G.D.M</u>
 - 3- GIT anomalies (TEF (treacheo-esophageal fistula), Duedenal atresia, Esophageal atresia)
 - 4- CNS anomalies (anencephaly, meningiocele)
 - 5- Abdominal wall defects (gastroschisis, omphalocele)
- True labor

VS

False Labor (threatened PTL)

-There is contraction -Abdominal pain -There is cervical changes -There is contraction -Abdominal pain -No cervical changes

If a pregnant women at 32 weeks come with uterine contractions twice each 10 minutes with no cervical changes ?

- Here we have to make sure that there is no cervical changes \rightarrow if not , we

reassure the mother

وترجع تراجع بعد 7 ايام

• If there is Cervical changes :

1- Admit patient

2- IV fluid + bed rest

Dr. said that 50% of patients will respond on Fluid + rest alone.

- 3- Give steroid "Dexamethason"
- 4- Give tocolytics to allow Dexamethasone to start functioning (48 hours)

Done by : Ahmad Abu-Alftuh

Morning Report Dr. Omar + Ahlam

Patient come with chronic HTN + Headache

كانت القراءة بتدل انه عندها sever PE

And she came in labor (true labor!)

What is your Management?

- 1- Check fetal well-being (do CTG)
- 2- Control her B. Pressure \rightarrow 1st thing we give is <u>Hydralazine IV</u>
- 3- IV fluids
- 4- MgSo4 and monitor its level

To prevent toxicity, follow up :

- 1- Patellar reflex (deep reflexes)
- 2- Respiratory Rate
- 3- Urine output
- 4- Mg serum level

5- <u>L.F.T + K.F.T</u>

Cr in PET of 0.7-0.8 is considered Abnormal!!

6- <u>Bishop score if</u> : Favourable \rightarrow induce and deliver vaginally Unfavourable \rightarrow still sever ? \rightarrow go for CS

(there is no relation between severity of the case and mode of delivery!)

7- <u>Foley's catheter</u> \rightarrow monitor urine output (>0.5 ml/kg/hr)

8- <u>After CS</u> :

- a- Monitor B. Pressure & vitals
- b-We continue giving MgSo4 for 24 hr
- c- Monitor Urine output
- 9- <u>We leave her in ward for 3-4 days</u> (risk for spiking B. pressure due to aldosterone surge after 3 days PostPartum)

Complications of PET :

- 1- HELLP
- **2- DIC**
- **3-Abruption**
- 4- Eclampsia

- Mode of delivery is not changed by the severity of the disease! :
 - Primigravida, <u>uncontrolled HTN</u>, <u>very severe</u>, not in labor, needs nearly 20 hours after induction → in this case go for C/S for sure !!
 - Multigravida, term, 4-cm dilatation, <u>very severe</u>, <u>uncontrolled HTN</u> → in this case you can go for vaginal delivery (labor occur within 1 hour)
- Pre-eclampsia is not an indication for C/S !
- Take baseline labs before delivery : Coagulation profile (PT, PTT, INR)
 , KFT, LFT →

Because it may progress to DIC, HEELP at any time!

Done by : Ahmad Abu-Alftuh

Dr. Omar Al-dabbas

✓ Fetal movment ->

16-18 w \rightarrow Multi-gravida

18-20 wk → Primi-gravida

Maximum fetal movement \rightarrow 28-32 w

> 32 w \rightarrow large baby \rightarrow no movement

Pap-smear (cervical smear)

Start at 21 years – every 3 years

And after 30 years every 5 years

DDx of heavy menstrual bleeding ?

Hormone

Systemic cause

Local cause

- 1- Hypo, HyperThyroidism
- 2- Medications
- 3- Family Hx of breast, ovarian Cancer

M.C.C of heavy bleeding \rightarrow

Hormonal imbalance

- Ovarian mass may cause heavy bleeding ?
 - **1-Estrogen secreting tumor**
 - 2- Metastasis to uterus
- ✓ Management of Heavy bleeding ?
 - 1- Progesteron (Marina) (Up to 5 Years)
 - 2- Combined OCP
 - **3- Endometrial ablation**
 - 4- Hysterectomy

Done by : Ayah AlRameni

Dr.Omar

Puerperal pyrexia

Mastitis not befor 7 days

Breast engorgement after 3 day

ROM

What examination?

- 1- general exam
- 2- vital signs
- 3-abdominal exam (lie and presentation)
- 4- there is contractions ?

→ ✓ If **yes** then do <u>pv</u> → ✓ If **no** do <u>speculum</u>

5- CTG

80% of PROM get into preterm labor by themselves

DDx of watery leakage ::

-liquor

–urine

- -discharge
- -semen
- -vaginal douching

If patient with ROM and stable admit her 24 hour at least

How to dx ROM by speculum ?

- 1- pooling of fluid in posterior fornex
- 2-seeing wave flow by your eyes
- 3- ask to cough

Once you do speculum exam you should take high vaginal swab so if chorioamnionitis happen later you can determine the organism

If bloody liquor think of placental abruption (tender abdomen) If U/S is free this <u>wont</u> Rule-out abruption (it is clinical Diagnosis!)

In placental abruption the progress of labor is rapid why ??

Bcz placenta separation will increase PG release

WBC in non pregnant women 4-11 In pregnancy up to 15 If its 18 == it is not acceptable ROM investigation

-CBC (WBC)

-CRP (baseline)

-Urine analysis

- -CTG (base line for follow up)
- #Case

35 w ROM with clear liquor and normal NST

Your management plan?

- 1-First admit the patient
- 2-Broad spectrum antibiotic (erythromycin) for gram -/+ and anaerobic
 - You don't need tocolytic after 34 week (we use it to give dexa before 34)
 - Don't deliver the patient before 36 (according to our ICU)
- 3-CRP twice weekly

4- daily vital signs

Early sign of chorioamnionitsis :: fetal and maternal tachycardia

✓ In anypatient in PROM if she is stable you should wait for 36 week after that if she is not in labor you should induce labor and deliver her vaginally unless there indication for CS

Large for gestational age == above 90th sentile regardless the baby weight

كل macrosomic baby هو LGA وليس العكس

If there recurrent miscarriage think of thrompophilia

Uncontrolled blood sugar increase risk of IUFD

Indication for CS

- ✓ If >4 with DM
- ✓ If >4.5 without DM

With corticosteroid the sugar will increase so you should increase the dose of insulin

Examination :

- ✓ Inspection
 - From the foot of the bed
 - Distended abdomen , move with respiration , full flank symmetry
 - → From Right side
 - Umbilicus (everted / centrally located)
 - Linea nigra
 - Scar
 - Striae

✓ Palpitation

Ask for pain

Best comment :: palpable mass extended to xiphosternum most likely gravid uterus

✓ Obs exam

- 1-SFH
- 2-fundal grip
- 3- lateral grip
- 4-first pelvic grip
- *skin incision does not reflect uterine incision

Something you should mention when you do examination

- 1-lie
- 2-presentation
- 3- uterine size by date
- 4-engagment
- 5-fixity
- 6-fetal movement
- 7-contraction
- 8-FHR (by auscultation)

Engagement is abdominal exam

اذا كان اكثر من 2\5 بكون Not engaged اذا كان 2\5 بحكي عنه Engaged اذا كان 1\5 بحكي عنه Fixed

Done by : Sajeda Waleed

Dr omar alddabas

✓ Epidural / spinal anesthesia

- We inject active material called bupivacaine
- Epidural catheter infusion pump (you increase dos as you need)
- During normal delivery use epidural because you dont know how much the time of labor
- Spinal : enough for 2 h (enough for CS time)
- Epidural (sensory>motor)
- More complications at general anesthesia 4 time regional anaesthesia (epidural and spinal)
- ✓ Layers:
 - 1. Skin,
 - 2. camper fascia,
 - 3. scarpa fascia,
 - 4. rectus sheath,
 - 5. rectus abdominis muscle,
 - 6. transvertebralis fascia,
 - 7. extraperitoneal fascia,
 - 8. perineum
- ✓ M.C organ injury is bladder
- ✓ If there previos surgery (risk of bladder adhesion) more risk to get injury at thus time also
- ✓ Where to look in floyes? Volume and color
- ✓ Any abnormal CTG do fetal blood sample
- مربعين صغار = 1 سم = 1 دقيقة : On CTG
- ✓ <u>Cases</u>

Fully dilated, - 2 station, late deceleration?

Fetal blood sample If PH : is good : wait

If acid do cs

✓ How to assess variability?

بدور علي دقيقه كامله بدون acceleration ولا deceleration وبحسب الفرق بين اعلي و اقل نقطه

✓ <u>Case</u>: 75 year old have spoting for 6 months

≻ Hx :

- 1. age of menopause,
- 2. action of patient,
- 3. progress of disease, amount, ass symptoms,
- 4. pap smear before?

```
اذا كانت عامليته قبل سنه ونص وبتعمله كل ثلاث سنين قبل هيك وكان تمام معناته unlikely cervical cancer اذا ما
عمر ها عملت بفكر بال cervical cancer
```

- 5. Ask also about fam hx of ca,
- 6. sure about source of bleeding,
- 7. parity (parity protect for endometriosis and ovarian ca but increase risk of adenomyosis)
- 8. B symptoms (wt. Loss, night sweat)

Examination

- 1. General look (anemic, dizzy, cachexic)
- 2. Vital signs
- 3. Breast exam
- 4. Abd exam
- 5. Adnexal mass Vaginal exam(speculum /pap smear)
- 6. Bimanual exam(Adnexal mass, uterine size, fixity)
- crowning :head extend to vulva and not receed in between contraction
- UTI is the most common cause of pain during pregnancy regardless of gestational age
- ✓ US for ovarian mass, thickness of endometrium (if 4mm thickness is significant)
- ✓ In post menopause take biobsy to rule out Endometrial ca
- ✓ M. C. C of postmenopausal bleeding is atrophic endometrium

✓ **Case**: 25 yo 6w amenorrhea newly married + abd pain

- Hx: spotting? Amount, duration, color, action
- > Examination:
 - Vital signs
 - Abd exam (tenderness)
 - Vaginal exam

Investigation

- ✓ TVUS,
- ✓ BHCG titer

✓ اذا كان ال Bhcg اكثر من 2000 وما لقينا شي عال TVUS بال Uterine

cavity بفکر ب (ectopic)

✓ اذا شفت gestational sac بستثنى ال

- ✓ Pap smear done after 21y and every 3 years
- ✓ After 30y do pap smear and DNA test every 5 yrs

Done by : Sajeda Waleed

Dr. Seham

• CS History taking :

A- During surgery

خلال العملية

- Type of anesthesia
- Duration of CS
- Complication during CS (bleeding, vital changesetc)

بعد العملية

- Blood need
- Outcome (baby's general health, weight, sex, NICU admission...etc)

B- After surgery

- Bleeding (analyze it : when, amount, Mx)
- If GA when did she fully wake up?
- Site of incision
- Started Ambulation (movement), eating, drinking
- Urination , gases (bowel movement)
- Leg pain
- Lactation (if she started to lactate or not)
- Abdominal pain due to uterine involution

Pain is colicky and ${f \hat 1}$ with lactation due to

Secretion of oxytocin

C- Normally after delivery, the uterus is found at the level of umbilicus in the 1^{st} day \rightarrow if uterus is higher, then, this is called :

Uterine Subinvolution

DDx of Uterine Subinvolution :

- **1- Distended bladder**
- 2- Fibroid
- **3-** Retained placenta
- 4- Ovarian or other masses

• Infertility causes :

- 10- **Ovulation failure**
- 11- Tubal factor (obstruction)
- 12- Uterine factor
- 13- Cervical cause
- 14- Combined
- 15- Male factor
- 16- Unexplained → most common

By : Ahmad Abu-Alftuh

Dr.Seham

✤ Any cervical lesion ?

- 1) Abnormal vaginal discharge
- 2) Spot bleeding

Adenomyosis ?

- 1) Painful heavy period (Typical)
- 2) Multipara
- 3) Late 30s, early 40s
- 4) On U/S \rightarrow loss of endometrial-myometrial Interphase

Any patient with abnormal Vaginal bleeding :

- 1) Bleeding Hx
- 2) Cycle Hx
- 3) Symptoms of Anemia
- 4) Drug Hx
- 5) If Premenopause OR Menopause → ask about :
 - a) Symptoms of menopause
 - b) Family Hx of Cervical CA

6) Ask about DDX : PALM COIN

- PALM-COEIN
 - Polyp
 - Adenomyosis
 - Leiomyoma
 - Malignancy and hyperplasia
 - Coagulopathy
 - Ovulatory disorders
 - Endometrium
 - latrogenic
 - Not classified

Endometriosis ?

- 1) Dysmenorrhea
- 2) **Dyspareunia**
- 3) Dyschezia
- 4) Infertility
- 5) Chronic pelvic pain

Any patient with infertility ?

Seminal fluid analysis

Menopausal HX

Regular cycle
Ovulatory

Irregular cycle → Anovulatoy

Treatment of PCOS according to Symptoms :

- 1) PCOS + amenorrhea -> withdrawal bleeding (using progesterone)
- 2) PCOS + infertility → <u>Ovulation induction with :</u>

a) <u>Clomiphene citrate</u> b) FSH, LH

3) PCOS + irregular cycle \rightarrow <u>OCP</u>

✤ Endometrial CA + Fibroid are estrogen dependent → we should take biopsy

Post date Pregnancy ?

- 1) Sure about G.A ?
- 2) Booking visit
- 3) Ante-natal care and any complication?
- 4) Pain (Labor)
- 5) Bleeding (bloody show)
- 6) Fetal movement
- 7) Liquor

Done by : Ayah AlRameni

Dr.Seham

POLYHYDRAMNIOUS

✓ DX

- US : 1) DEEPEST VERTICAL POCKET (2-8) NORMAL
 2) AFI 5-25 normal
- By exam :
 - 1. Rapid abdominal distention
 - 2. SOB
 - 3. lower limb edema (not specific)
 - 4. uterine size large than date
 - 5. shiny skin
 - 6. difficult to identify fetal part

✓ Risk factors :

- 1-hx of GDM
- 2-HTN
- 3-FAM HX
- 4-HX OF MACROSOMIC BABY
- 5-chronic diseases and steroid use
- 6-recurent UTI / fungal infection

Polyurea is not specific bcz it physiologically occure in pregnancy

Do detailed anatomic scan if these Risk Factors are present!

#what anomalies cause polyhydramnious ?

- **Neural tube defect** (spina bifida and anencephaly)
- Gl obstruction (deudenal atresia by us double bubble sign / esophageal atresia by us absent stomach)

((So do aminocentesis for karyotyping (down syndrome))

#oligohydramnios causes

Obstructive uropathy

Renal agenesis

Lung hypoplasia

 \checkmark if GDM after 20th week there is no risk on organogenesis

✓ Congenital heart diseases more common in pregestational DM

✓ IN CHRONIC DM YOU SHOULD CONTROLE BLOOD SUGAR BETWEEN CONCEPTION AND IN FIRST TRIMESTER

\checkmark DM investigation look for detailed anomalies and karyotyping ::

- Digeorge syndrome , may associated with heart defect
- Edward associated with club foot / bilateral left lip / holoprosencephaly

#recurrence of GDM is very high, you even should suspect DM after delivery

✓ **challenge test** : patient not need to be fast

✓ **Tolerance test** need to be fast

You need two abnormal reading to say it GDM

Fasting 95

1st hour 180

2nd hour 155

3rd hour 140

Its GDM if \rightarrow fasting more than <u>126</u> random more than <u>200</u>

✓ In carb diet avoid simple sugar

✓ short cervix increase risk for preterm delivery but it is not indication for cerclage

✓ Braxon hick (painless) if more 28 week

✤Blood sugar

Our target is preprandial 90

1 hour postprandial 140

In calculation we use pre pregnancy weight

✓ hypoglycemia is associated with IUFD

✓ hyperglycemia postprandial Is risk for macrosomia

#to monitor blood sugar you need 7 reading preprandial and post prandial for each meal and at bed time

How to monitor pregnancy ??

- 1. Serial U/S exam
- 2. AF
- 3. fetal growth
- 4. fetal wellbeing
- 5. Regular blood sugar reading

M.C.C OF polyhydramnios is idiopathic

Here you will do amnireduction and indomethacine (in non DM pregnant women)

if she had utrine contraction

Management :

- 1. Tocolytic oxytocine antagonist(atosiban) /
- 2. corticosteroid /
- 3. antibiotic (prophylactic)cephalosporine
- terbutaline is C.I in pregnancy
- nefidepine cause headache /flushing / hypokaemia

progestin not stop contraction

And used for high risk patient for preterm labor

tocolytic stop contraction in early pregnancy

 ✓ if you use indomethacine stop it at 32 week bcz it lead to premature closure of PDA (reversible) And may cause pulmonary HTN

✤<u>in GDM time of delivery</u>

- 1. Insulin + controlled sugar == not before 37-38
- 2. On diet == wait until 39

Done by : Sajeda Waleed

Dr seham round

miscarriage

✓ Incomplete miscarriage

≻ Hx:

- vaginal bleeding and passage of tissues
- Abd pain increase with time
- Examination:
 - Open cervix
 - uterus smaller than date
- ≻ US:
 - Retained products of conception
- Management:
 - evacuation

✓ Complete miscarriage

- ≻ Hx:
 - vaginal bleeding,
 - abd pain decrease with time
 - passage of tissue
- Examination:
 - Samller than date,
 - closed cervix
- ≻ US :
 - empty uterus and no products of conception

Pregnancy of unknown location (at early pregnancy before the time that gestational sac is visible on US) :: Either ectopic or complete miscarriage or intrauterine pregnancy.

✓ Threatened miscarriage

≻ Hx :

- Mild lower abdominal pain,
- mild vaginal bleeding
- Examination
 - Closed cervix,
 - uterine size smaller than date
- ≻ US:
 - intrauterine pregnancy,
 - fetal heart (+-) according to gestational age
- Management:
 - Expectant
- D and C if cervix closed

Evacuation if cervix opened (dilated)

✓ Missed miscarriage

- ≻ Hx :
 - No abd pain
 - Vaginal spotting
 - Mostly asymptomatic
 - Loss of signs of pregnancy
- > Exam:
 - Closed cervix
 - Uterine size with date or smaller
- ≻ Us :
 - Intrauterine gestational sac + fetus (cardiac activity???)
 - → If fetus echo 5mm without fetal heart = missed miscarriage
 - → If fetus echo less than 5mm wait to see progression

- → If gestational sac without fetus = blighted ovum
- ➔ If gestational sac >25mm without fetal inside also it is blighted ovum
- > Management:
 - D and C (surgical)
 - Prostaglandin (medical)
 - Expectant

Dont wait (expextant) more than 3 week? Bcz increase risk for DIC and infection

4 Ovarian vein thrombosis

- > Hx : fever and abdominal pain
- > Dx : by US dropper and ct scan
- Management: Anticoagulant

Done by : Sajeda Waleed

Dr. Malik

✓ Dyspnea in Pregnancy?

- **1- Progesterone effect on Respiratory center**
- 2- Effect of gravid uterus

✓ Normal Vaginal delivery

- **1-Spontaneous expulsion**
- 2-Single fetus
- **3- Not assisted**
- **4- Normal presentation**
- 5- Normal position
- 6-Term
- 7- Alive baby , B.W 2.4-4.2 Kg
- 8- No post-partum complications
- 9- With/without Episiotomy

10-Occur Within a reasonable time

✓ Recurrent misscarage (3 or more consecutive abortions) →
 Suspect Thrombophilia

 \checkmark Do spiral CT with PE protocol for any pregnant suspected to have PE

 ✓ Any pregnant with SON (sever) → Suspect PE 	
Begin Treatment then do investigations	
 Avoid C/S in patients with PE → Î Risk of DVT (This due to the Pelvic Set) 	urgery itself)
 Cerebral Palsy → Due to intrauterine Hypoxia 	
* not related to type of delivery	
 ABGs in pregnancy → Respiratory Alkalosis ECG → Left Axis deviation 	Normal in Pregnancy
 Early sign of PE → Sinus Tachycardia ** 	
 Monitoring of Anti-Coagulant Therapy ? 	

- 1- L.M.W (fractionated) Heparin -> Activated Factor 10 (Xa)
- 2- Warfarin → INR , PT
- 3- Unfractionated Heparin → PTT
- 4- Aspirin → Bleeding Time

• Indications of PV (Intrapartum) :

- 1- Intrapartum bleeding
- 2- Fetal distress (cord prolapse)
- 3- Spontaneous rupture of membranes
- 4- If there is no urge to push ??
- 5- Before giving analgesia

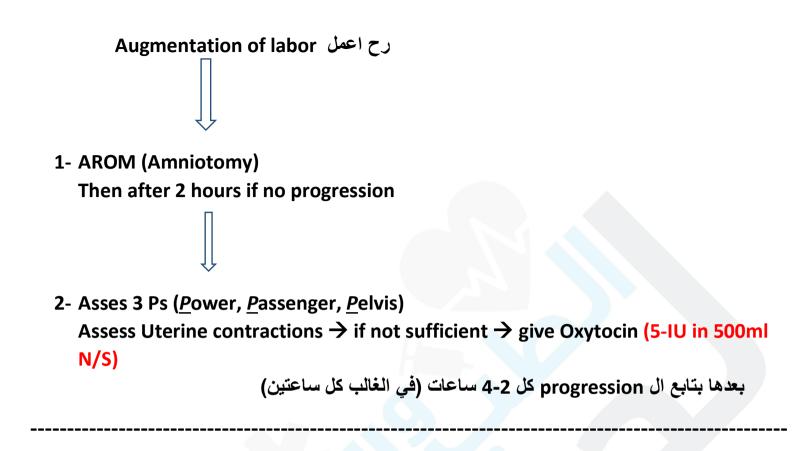
• Clinical Case Scenario #1

Augmentation/induction

"4 cm dilatation , 70 effacement , -3 Station"

What is your management ? \rightarrow

4 cm dilatation \rightarrow element of labor معناها في



M.C.C of post-term pregnancy ? →

Wrong date

Enzyme that causes post-term Pregnancy ? →

Placental sulfatase

Done by : Ayah AlRameni

Dr. malek

بزيد 7ايام وبنقص 3 اشهر : Naegele's rule

- used only if :
 - 1. period is regular,
 - 2. not use OCP,
 - 3. no lactation,
 - 4. the cycle every 28 days
- ✓ Menstrual cyclec 2 phases :
 - Follicular phase (هون الاختلاف)
 - ثابت عند الكل ومقداره 14 يوم Luteal phase •
- ✓ True labor = efficient uterine contraction + cervical dilatation
- ✓ False labor = contraction without cervical dilatation
- ✓ Abdominal uterus after delivery :
 - اذا ما كان هيك رح يصير نزيف بعد الولاده Contracted and firm •
 - After delivery the uterus at level of umbilicus
 - if above it so there is something retained
 - Reach pelvis after 10 days (involution)
 - Subinvultion (اذا ما رجع لل) pelvis)

: شروط ال NVD-

- 1. spontaneous
- 2. not induced
- 3. full term
- 4. single
- 5. vertex
- 6. direct occipitoanterior
- 7. not assisted vaginal delivery
- 8. with / without episiotomy

9. alive10.2.5 to 4.5 kg11.no NICU12.no complication

✓ First ovulation after pregnancy >> less than month

✓ Postpartum care

- vital signs -observation diet can eat after one hour if vaginal
- B HCG is positive until 21 days after delivery
- Type of Surgery
 - 4 If elective : clean contaminated
 - 4 If emergent : **contaminated**
- Normally bleed during vaginal delivery 500 ml, give iron, calcium, and pain killers
- ✓ Most common Indication for 1st CS is fetal distress,
- ✓ Most common indication for 2nd CS is previous CS
- ✓ Note : allow vaginal delivery after one cs (low uterine segment)
 - TOLAC : trial of labour after cs
 - VBAC : vaginal birth after cs

✓ At first visit antenatal care

- 1. BP
- 2. Blood sugar
- 3. CBC (HB, WBC up to 30,000, Plt normally decreased slightly)
- 4. Rh and blood group

- 5. Rubella Ab,
 - normally positive IgG and negative IgM (اذا العكس احتمال يصير) congenital Rubella syndrome)
 - positive IgG = immunity
 - positive IgM = acute infection
 - If both negative so give vaccine
 - Rubella vaccine it is live attenuated so contraindicated to given in
 - > one month before conception and
 - during pregnancy
 - it given postpartum directly before discharge
- 6. HBsAg
- 7. Thyroid function test
- 8. urine analysis for proteinuria and glucosuria

✤ Folic acid

- is given 3 months before and 3 month after conception
- Neural tube close at 4 w (21-28 days)
- Spina bifida occurs in 4% in whom dont take folic acid and 1% in whom take folic acid
- In Jordan we give 5mg folic acid
- For high risk 4 mg and for low risk 0.4 mg

✓ At 12th week

- US for fetal anatomy
- Nuchal translucency (thick neck) = Fluid collection due to lymph nodes obstruction
- If don't see nasal bone (probably down syndrome) And look for bone in general (skull and limb)
- Most common trisomy compatible with life is down syndrome Down trisomy 21

- ✓ At 16 week
 - gender
 - body growth (femur length / head circumference /abdominal circumference)
- ✓ At 18-24 week detailed anatomy scan
- At 28 week do echo to known presentation (breech) and location of placenta
- ✓ **At 9th month** of pregnancy visit every week
- Causes for decreased Fetal movement
 - 1. Polyhydramnios
 - 2. Fetal sleep
 - 3. Immaturity
 - 4. Anterior placentation
 - 5. Maternal hypoglycemia

-اكثر وقت للحركه بين ال 9 مساء - 1فجر

Done by : Sajeda Waleed

DR. Malek

✓ **<u>Case</u>**: IUFD in pre-eclampsia occur due to placenta abruption

Hx : Para 5, 27 week Headache and epigastric pain BP 190/110

Dx :severe pre-eclampsia

4 Managment:

1- HTN drug

- target BP is 140/90
- Labetalol first choice (B BLOCKER)
- If Labetalol not available give **Hydralazine** (vasodilation /vascular smooth muscle relaxation)
- If Hydralazine not available give **Nefidipine** (adalat) (CCB)
- Never give methyldoba(alpha 2 agonist) bcz it is given for chronic HTN bcz it need 48h to act

2-Prevent seizure by mg sulfate

- Dose :
 - ✓ Loading dose = 4-6 g
 - ✓ Maintenance dose 1-2g/h
- Mg sulfate monitoring by
 - ✓ patellar reflex (biceps if epidural anesthesia)
 - ✓ Respiratory reflex
 - ✓ Urine output
 - ✓ Mg serum level
- 3- delivery

4 Post op managemen

for PE >> Labetalol and ACEI /ARBS

for CS >> wound care

for IUFD >>psychological support

- methyl dopa contraindicated during lactation bcz it cause lupus in baby

✓ <u>Case:</u>

اجت مريضه بعد ست ايام من الولاده بتشكي من pyrexia

Dx : Mastitis(if IUFD) due to milk pooling inside breast

Rx : by decrease prolactin by cabergolin and bromocriptin

اسم هذه الطريقة (تنشيف) ولازم المريضة تبدا توخذ الدواء قبل ما تروح من المشفى

Other dx :

At first day = atelectasis

At 2nd and 3rd day = UTI

At 4th and 5th = wound infection, DVT, hematoma of CS incision

At 6th day and more = mastitis

لو سالتنى شو اعمل مشان ما يصير IUFD بالاحمال القادمة ؟؟

- BP observations
- Aspirin

-How to predict it ? By uterine doppler US

✓ <u>Case:</u>

Hx: Gravida 3 para 2 (vaginal (1st) cs (2nd)) 42 week

-How to induce labor? Start with **mechanical dilators** (foley catheter) Then **aminotomy** Then **oxytocin**

-Never give prostaglandin in thes case, why? Increase risk of uterine rupture

-When to say success induction? 3-4 cm

-for <u>Unfavorable cervix</u> need to **augmentation** by PG, foley then induction by aminotomy, oxytocin

-for Favorable cervix need to induction only, by aminotomy, oxytocin

-To deliver twin vaginal delivery most be 1st twin in vertex presentation and 1st twin larger than 2nd twin

- All instruments used only in cephalic presentation and in station zero or below +1,+2,+3, one exception for this is In breech used only after coming of head and .

-Station -1,-2,-3 contraindication to use instruments except in 2nd twin baby

✓ <u>Cases:</u>

-36 weeks breech? Elective after 38-39 (All breech indication for cs)

-Cord prolapse after ROM? Crush CS

-ROM yesterday, stable, fail of augmentation? Urgent cs(within 24h)

-34 weeks Primigravid breech and rom, closed os, maternal tachy, maternal pusle 120? Chorioamnitis give antibiotics and do cs

-38 week prev one cs 6cm dilation variable deceleration? Risk for rupture uterus

-40week breech and ROM, 1cm dilation, mecuniom? Normally to find mecuniom in breech

Done by : Sajeda Waleed

DISCUSSION Dr.Adel

in Antiphospholipid syndrome we have 2 choices :

- 1. LMWH (start once fetal heart Appear at (7 8 W)
- 2. Aspirin (once preg Test is positive start Aspirin)

Both stop at 36 W.

Large Term side effect of unfractionated Hep

{ 1. Thrombocytopenia 2. Osteoporosis }

Thrombophilia : 1. Genetic \rightarrow This Type not lead to miscarriage.

2. Auquired(Antiphospholipid) \rightarrow lend to miscarriage

** Other cause of miscarriage is :ightarrow

- ✓ DM (Most common)
- ✓ Cervical incontinence (Mostly in 2ndtrimester)

→ Dx→

Hysterosalpingogram(done in nonpreg).. at day 21 (peak of progesterone) → sphincter Action in case of in competence = funnelling of cervix .

→ 2. Treatment → Cervical cerclage

 (purse Ring stiches) (Transvaginal) { We don't dissect Bladder} →
 put on 12 - 14 W
 (Missolen tape = this is the type of tape used for cerclage هذا نوع

```
ما بنعمل cerclage قبل هيك لانه اذا صار misscarrage قبل هاي الفترة ففي الغالب السبب 
chromosomal abnormalities
```

Other causes that may lead to Miscarriage \rightarrow 1-Bicornuat uterus 2-Septate uterus 3-Adhesion 4-Asherman 5-Fibroid .

Before this operation , you should \rightarrow

- 1. Confirm gestational Age By US (crown rumb length)
- 2. Viable or not
- 3. Congenital malformation
 - Duration = 5 min
 - Position = Deep head down position

Complication \rightarrow 1. Infection

- 2. ROM
- 3. injury to Bladder (may lead to Fistula formation)
- 4. Few Drops of Bleeding
- 5.We work on cervix \rightarrow Release of PG

when to Remove? Completed 37W to completed 42W

If preterm labor occur in the presence of 2 Stiches , this may lead to Uterine Rupture → (Bucket Handle Rupture) → very severe Bleeding .
SO!! Once lady feel contraction , she should go to Hospital .

DX → 2. # Hegar ??{ * used in non preg ... // * under GA always (Because it may lead to neurogenic shock) Start from 10 and go down >> If 8 entered then it is diagnostic for Cervical incompetence (all doctors) If 6 entered then it is diagnostic for Cervical incompetence (Dr. Adel)

<u>##NEW</u>

Mg sulfate * 4-6g loading dose Then 1-2g maintenance dose * given in normal saline (big Syringe)

How to monitor?

- 1. Pattelar Reflex
- 2. Resp (not less than 12)
- 3.U.output (Hourly)
- 4. Serum Mg sulfate

All doctors : not less than 16 / min Dr.Adel : not less than 12 / min

Discussion/Round/ Dr.Adel

glucose challenge Test (screening test)

No Need to be fasting

Give 50g glucose + 300ml of water ...wait 1H then check Blood glucose .

If >140 do OCTT \rightarrow give 75 glucose in 300ml of water (must be Fasting)

Do 4 Reading if 2/4 is Abnormal its D.M

Target { Level of Preloading 95 ... 2H post loady 126 }

How to control B.sugar ??

- 1. Diet \rightarrow 2000 calories / 24 H (50% carbs / 20% fat / 30% protein)
- 2. Insulin
- 3. Metformin

IF we have 60 Unit insulin,

- → 40 unit (Before Breakfast) (* 1/3 short ...work for 4-6H ///* 2/3 intermediate 12 H).
- → 20 Unit (Before dinner) (* 1/2 short * ½ intermediate).

```
اذا اجت المريضة الصبح قبل وجبة الافطار و كان عندها ال blood sugarاكثر من 120 معناها لازم
ازيد جرعة ال intermediate اللي بالليل
اذا اجت المريضة وكان عندها hypoglycemia قبل وجبة العشاء باليوم معناها لازم اقلل جرعة ال
intermediate تاعت الصبح .... وهكذا
```

if she will go to surgery , what to do ?

- 1. Miss Morning insulin
- 2. Give IV glucose
- Give 4-6 unit of short acting in dnp
 ** check glucose every H

بعد الولادة برجعها على ال Pre-Pregnancy dose او على 50% من الجرعة الي كانت بتوخذها الثناء الحمل (في حال كانت ناسية الجرعة قبل الحمل كم كانت)

Effect of Diabetes

#First Trimester

- 1. Miscarriage (leading cause of recurrent miscarriage)
- Cong malformation → (1. Cardiovascular /2.sacral agenesis /3. Neural tube defect (most common))

#2nd Trimester

- 1. Miscarriage< 24 W
- 2. IUFD > 24 W
- 3. Polyhydramnios
- 4. PET (15 30 %)→ you should Rule out gestational DM/PET (أي وحدةعندها)→
- 5. Pre term labor \rightarrow due to (1. Poly Hydr / 2. Cong malformation)

DM is not indication for CS !

- Risk of shoulder dystocia

OBST .complication

- 1. IUGR (due to Hypoxia)
- # Fetal death due to
- Acidosis (Hyperlactiacidemia) (IUFD)

→ This is why we deliver these patients before 39 weeks

#neonatal complication

1-hypoglycemia (seizure / intracranial bleeding)

2-jaundice (due to immaturity of conjugation enzymes)

3-hypocalcemia

4-hypo mg

5- ARDS

#liver of immature and mature (but have DM) will have jaundice and ARDS

```
#maternal hyperglycemia = fetal hyperglycemia = b cell hyperplasia = hyperinsulinemia = risk of hypoglacemia within 24 of birth
```

#effect of DM on pregnancy (mother) :

1- infection :

UTI

Candidia (why??) bcz vaginal PH will be more acidic = more favorable for candida

PH of vagina in Non pregnant 4 Pregnant 3.5 Pregnant + DM 2-2.5 Why PH is acidic in pregnancy ?? Bcz lactobacilli convert glucose to lactic acid ## After delivery there is no contraindication for any contraception (any thing she want) ::

If she not want to lactate , after how much time you will start contraception ? 3 week

If she want to lactate ?? 6 week (Failure rate 10%)

Use combined ocp after 6 month (because it will suppress lactation)

حتى لو مشيتها على progestin-only pills لازم احولها بعد 6 اشهر على COCP لانها progestin-only pills)

if there miscarriage after how you will start contraception???

Immediately before leaving hospital bcz she will ovulate 2 weeks after miscarriage



Done by : Sajeda Waleed

Dr.Ahlam

◆ Pre-term labor ? (mainly caused by infection , infections cause weakness in membranes → increases the susceptibility of membranes to rupture)

- 1) GBS
- 2) Gardinella
- 3) UTI

Sudden death during delivery ?

Always think about → A) Amniotic fluid embolus B) Anaphylactic shock

16 weeks G.A + ROM ?

- 1) Fetal complications → Lung hypoplasia
- 2) Mother complication → chorioamnionitis

These complications may be seen in any pregnancy complicated by ROM during <u>16-30 weeks</u> gestation

* Any patient with Vaginal bleeding ask about :

- 1) L.M.P
- 2) Pregnancy test (When?)
- 3) First visit (Why?)

♦ Remove thread of IUCD by ? → D&C

✤ 1 unit of blood I Hb by 0.8

Hb must be <u>10 or more</u> before surgery ... why?

- 1) Risk of bleeding
- 2) Wound healing ($\hat{\Pi}$ risk for infection)

ROM is not an indication for C/S unless ROM is complicated BY :

- 1) Cord prolapse
- 2) chorioamnionitis
- 3) Fetal distress
- 4) Abnormal presentation
- 5) Placental abruption
- 6) Failed induction

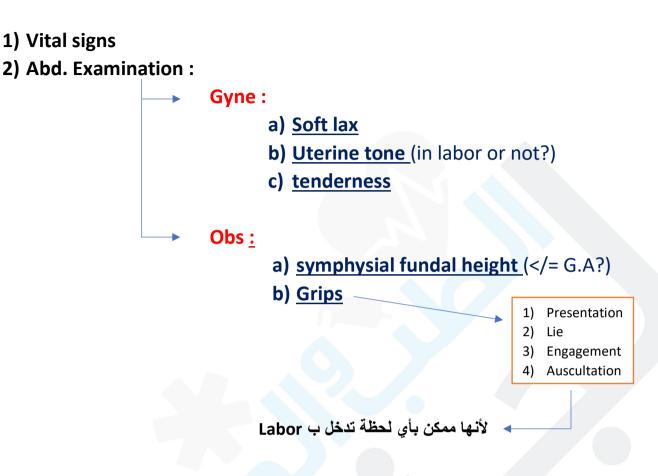
* <u>ROM :</u>

(1-Hx)

- 1) Make sure about G.A
- 2) Hx of Urine incontinence
- 3) Hx of vaginal discharge
- 4) Character of Liqour :
 - A) Gush of fluid
 - B) Soaked clothes
 - C) Color
 - D) Odor
 - E) Associated with abdominal pain/bleeding

* <u>ROM :</u>

(2-Ex)



* <u>ROM :</u>

(3-Speculum (bivalve))

- 1) Cervix closed or open ?
- 2) Signs of ROM :
 - a) Pooling in posterior vaginal fornix
 - b) Gush of fluid in cervix

<u>** If there is no abnormality in speculum exam \rightarrow Cough Test</u>

```
What we use Speculum for ?
```

- 1) Signs of ROM
- 2) Cord prolapse
- 3) High vaginal swab (G.B.S)

Infection 3-4 days after Rupture of membranes

Then ?

- 1) Admission (to initially assess the presence of chorioamnionitis)
- 2) I.V cannulas
- 3) CBC (WBC)
- 4) Baseline CRP
- 5) Cross match , blood grouping
- 6) Urine culture
- 7) Give steroid + erythromycin (erythromycin is given for 10 days OR until delivery occur)

** daily assess : 1) Temp

2) discharge 3) fetal movement 4) vital signs

* <u>When to deliver</u> ? that depends on the development of chorioamnionitis :

 \checkmark At 34 w if there is no chorioamnionitis (using induction)

✓ Regardless of G.A if S&S of Chorioamnionitis developed!!

Digital Exam ?

- 1) ROM + spontaneous labor
- 2) ROM + Bleeding
- 3) Element of chorioamnionitis

DDx of Thrompocytopenia :

- 1) HELLP
- 2) ITP
- 3) Anti-phospholipid syndrome
- 4) Gestational Thrompocytopenia (mostly during 3rd trimester)
- 5) LMW heparin
- 6) Infection (EBV, Parvo virus)
- 7) Folic acid deficiency anemia (megaloblastic anemia)
- ** Drug of choice in <u>PROM</u> → erythromycin

** Drug of choice in <u>Chorioamnionitis</u> → Gentamycin

Side effects of IUCD ?

- 1) Heavy bleeding
- 2) Infection occur in 1^{st} weeks \rightarrow endometrioses
- 3) Low back pain

Sure if IUCD in uterus by U/S

If it is not there \rightarrow <u>do X-ray</u> (it may perforated the uterus!)

Done by : Ayah AlRameni

Dr.Ahlam

Age (what increase) :

- 1- increase chromosomal abnormalities
- 2- increase chronic medical illness
- 3- pre-eclampsia
- 4-increase risk of miscarriage (due to chromosomal abnormalities)
- 5-antepartum hmg
- 6-endometrial ca and cervical ca

Young age :

1- CPD due to inadequate pelvis so increase risk of cs

2- increase % of small babies

```
لانه الام اثناء الحمل بدها طاقه اكثر والطفل بستهلك من طاقه الام الي هي قليله
```

3- increase risk of thromboembolism so give anticoagulant + encourage early mobilization after surgery

Occupation , why ??

- 1- socioeconomic status
- 2- educational level

3- x-ray (teratogenic)

4-if work with children (increase risk of rubella, chicken box, measles)

5-if work with lab (increase risk of hep c, b and hiv)

6-toxoblasmosis

اذا بتشتغل طب بيطري

متي بناخذ بعين الاعتبار تاريخ الدوره الي حكته المريضه ؟

- 1-sure??
- 2-No lactation
- 3-No OCP (estrogen)

لانه لما المريضة بتوقفه بصير withdrawl bleeding بالتالي ما بعتبره actual period

4-Regular?

** para ::

لازم تولد بعد ال 24 اسبوع لحتى اعتبر ها Para

Antepartum hemorrhage DDx :

- 1. placenta previa (painless)
- 2. vasa previa (hx of rupture of the membrane)
- 3. placenta abruption(painful)
- 4. pudenculated fibroid
- 5. cervical polyps
- 6. vaginitis (foul smelling discharge then bleeding)
- 7. bloody show (blood + mucus)

Examination

- 1. general look
- 2. vital signs
- 3. symph fundal high
- 4. contractions
- 5. tenderness
- 6. fetal movement
- 7. fetal heart rate (doppler us)
- 8. speculum examination for <u>Dilitattion</u> + <u>cervical lesions</u> + <u>amount of</u> <u>bleeding</u> (contraindicated in placenta previa!!)

✓ Heavy bleeding : placenta previa and abruption

When you suspect membrane rupture you should do cs

✓ Post op Hx :

- 1. alive / dead
- 2. F/M
- 3. preterm / full term
- 4. B.W
- 5. NICU
- 6. any complications

✓ بستخدم كلمة placenta previa بعد ال 28 اسبوع لانه قبل هيك بتكون بال lower uterine ولساتها مش developed لكن بعد 28 اسبوع بتبلش تروح للمكان الي فيه blood segment على الي هو موجود بال upper uterine segment

- ✓ Connection between lower uterine segment is called isthmus and developed well after 28 weeks
- ✓ Doing cs in lower uterine segment cause less bleeding and less risk of uterine rupture

During operation we do dissection blades

In twin the lower uterine may become mature before 28 weeks

Placenta previa must be within 2 cm of internal os

 \checkmark HB less than 10 \rightarrow blood transfusion

In twins low lying placenta >> increase risk of anemia

Placenta Previa :

If patient with placenta previa and everything is normal with no complications, what to do?

1- admission and observation for 48 at least

2- give dexamethasone (24-34) because risk of cs at any time

بخليها تراجع بعد ثلاث اسابيع وبفحصها بعد الاسبوع 28 لانه ال placenta ممكن ترجع لمكانها نتيجة ال contractions

26-36 visit every 3 week

After 36 every week

بالتوائم بتزيد احتماليه ال previa ليش ? ... لانهمخ بحتاجوا blood supply اكبر فبالتالي بغطوا مساحة ا

لما تكمل 37اسبوع بولدها لكن قبل هيك لو اجت بنزيف بولدها لانو في خطر ع حياه الام

The lower uterine segment has less collagen so no contraction so will continue to bleed but if normal placenta in upper segment >> contain muscle so there contraction wich will stop bleeding

placenta previa because previous previa and cs المره الجايه من الحمل رح تزيد فرصه ال

Risk of postpartum hemorrage \rightarrow multiple gestation(atonic uterus)

Done by : Sajeda Waleed

Dr.Mohammad Khader

✤ Miscarriage

• Case of 10 weeks G.A came for Pregnancy termination! Previously, on 6 weeks G.A she came for routine U/S & there was No Fetal cardiac Activity

- Dr Asked what are the DDx ?
 - → Wrong date (MC)
 - ➔ Miscarriage

((someone said Ectopic and the doctor answer was : since we saw the gestational sac Intrauterin, then, Ectopic is not considered as DDx!))

- So what we will do next ?
 We wait for 2 weeks and repeat U/S :
 - \rightarrow If there is fetal cardiac activity \rightarrow that means it is Wrong Date
 - → If there is No fetal cardiac activity → that means it going to be a miscarriage (missed)

P.S : beta-HcG is not of a benefit in this cas

If the case id confirmed as miscarriage, what is your Management ?
 We have options here : Expectant
 Medical

Surgical

1- Expectant Mx : we wait 1-2 weeks for spontaneous miscarriage to occure, we cant wait more than this due to TRisk for : 1) DIC

2) Psychological effect

2- Medical Mx : we give Misoprostol "PGe1" (Oral, Sublingual, Vaginal, Rectal)

{We give this}

- Dose 800 mcg
- We Admit the patient the we give it <u>(Never EVER give Misoprostol to a</u> patient and leave her go home!!)
- After I give her, I wait till pain & bleeding starts, then I do Vaginal Ex to see whether it : Complete OR incomplete

- Complete

Bleeding short duration
 (ينتهي بانتهاء نزول الجنين)
 cervix closed
 uterus contracted & small

Incomplete

- 1- bleeding is continuous
- 2- cervix opened

3- Surgical Mx : \rightarrow if missed \rightarrow Complete \rightarrow no need for surgery

► Incomplete → Evacuation & Curettage

(أيضاً الدكتور حكى انه بنعمل surgery اذا كان ال G.A اكبر من 12 اسبوع؛ لأنه حجم الجنين بكون كبير وممكن يكون في Bones)

- When I need to use Medical + Surgical at the same time ?
 - If I need to do D&C but there is risk for cervical injury/trauma, so I give Misoprostol for dilatation of cervix then E&C
- So as a conclusion : this case of 6 weeks G.A with no F.C.A
 We wait for 2 weeks → DDx
 Wrong date & visible F.C.A
 خلاص الإمور تمام

If missed \rightarrow expectant

By waiting another 2 weeks

If no spontaneous abortion

We do Medical + - Surgical

What about recurrent Miscarriage?

 Miscarriage considered as recurrent <u>only if miscarriage occurred in >= 3</u> <u>consecutive pregnancies</u>

• لازم یکون 3 مرات او اکثر, ولازم یکونوا 3 احمال ورا بعض

- 2 miscarriages is not considered as recurrent miscarriage <u>but î Risk for another</u> <u>miscarriage</u>
- If recurrence occurred (I mean 3 times or more) → then I have to search for a cause (chromosomal abnormality, uterine anomalies...etc)
- If 1 or 2, patient should know about her case, I explain that for her (it might be chromosomal abnormalities or other causes ...)

<u>Done by : Ahmad Abu-Alftuh</u>

Round table : dr. Amal

Case1:

Female patient with high BMI ,irregular cycle and 5 yrs infertility ,what to do in regard investigations?

Note – irregular cycle with infertility means there is an ovulatry problems	
Invest:	
- seminal fluid analysi	is: count : 15 million /ml
	Morphology : 4%
	Motility : linear 32% , total 40%
- hormonal profile: fs	h &LH in 2 nd /3 rd of menstruation
17	hydroxyprogesterone in 21 day
-US : for uterus and o	varies
	n : after the cycle ,before an ovulation day evaluate the tube and uterus .

* if we see obstructed tube(filling defect in hysterosalpingogram) the next step is: hysteroscope

Its causes :

1- adhesions

2- asherman syndrome

3- endometriosis

4- PID

how to evaluate an ovulation problems in women ?

1- history :irregular cycle ,pain ...

2- investigations : LH,FSH,17-hydroxyprogesterone ,....

3- to confirm : endometrial biopsy in secretory phase at day 21 also with mentoring of the ovum via vaginal probe on days 13-15 of cycle (normal size :18-36 mm)

Back to the first case \rightarrow

Her hormonal profile is: LH: 12 ,FSH: 3 , prolactin normal ,slight elevation in testosterone level and low 17 hydroxyprogesterone what is your diagnosis?

PCOS

Why?

The LH:FSH ratio is more than 2:1, elevated testosterone and her previous symptoms

How to treat her?

- 1- change her life style to lose wight
- 2- metformin for insulin resistance

3- induction of ovulation :

A- oral: clomiphene citrate

B- injectable: HMG

C- surgical : IVF,IUI,ovarian drilling

* bcs of ovarian drilling side effects such as premature ovarian failure; nowadays its get done in one ovary rather than both of them .

CASE2:

LH:5 ,FSH:15, 17-hydroxyprogesterone is low Your diagnosis?

Decrease ovarian preserve ...your next step investigation ? do AMH (should be low in this case)

CASE3:

LH:5 ,FSH:40 ,17-hypro is low ,she is 30yrs old your diagnosis ?

Premature menopause

* how to differentiate between these two cases? is by FSH levels where its high in both of them but in premature menopause usually above 40 with also signs and symptoms of menopause . * salpingogram is not useful in case of endometriosis so the gold standard is hysteroscope.

To confirm endometriosis diagnosis is by biopsy which shows glands and stroma

*asherman syndrome appears like a T shaped uterus on HSG

*the causes of infertility in endometriosis are adhesions and anovulation problems

*how to deal with a case of endometriosis ?

At first confirm your diagnosis ,then according to her age, severity of symptoms and her fertility wishes .

As for example in 20yrs old single lady treat with NSAIDs and contraceptive pills

For 50 yrs old lady do hysterectomy and oophorectomy .

CASE4:

30yrs old lady married for 3yrs after her 1st baby she had two miscarriages ,she presented to your clinic as case of 6 months amenorrhea ...

After history taking ,the most important thing is to rule out pregnancy and make sure she is not in progesterone contraceptive methods .

#the dr said you need to check and study :

- ovarian hyperstimulation syndrome
- asherman syndrome
- HSG
- speculum types

Done by : Sondus Nassar