



## Introduction to the obstetric history

Salam every one 😊, this sheet is a piece of cake ...trust me:D

### The age of the patient:

It is very important because some ages are associated with certain diseases; a pregnant lady that is more than 35 years old must be screened for **chromosomal abnormalities** like Down syndrome. Also these old patients have a high risk of **diabetes**.

A 16 years old pregnant lady will be at high risk of hypertension “**preeclampsia**“. Actually, about **18%** of young ladies less than 20 years old will have preeclampsia (i.e. one of each 5 pregnant ladies). So we consider these patients “high risk patients” and they must be controlled.

**Gravidity:** it is the number of pregnancies (including the current pregnancy) **gravida 5** is a woman that has been pregnant for 5 times. The higher the gravidity the higher the complications and problems during pregnancy.

**Parity:** it is the number of deliveries (vaginal or caesarean) i.e how many times she delivered a baby after 24 weeks of gestation (according to WHO).

If a woman is **gravida 2 and para 1** then she has been **pregnant twice** and has only **one baby** (Pregnancies consisting of multiples, such as twins 🤞 or triplets 🤞, count as one birth, so she might be para 1 and have more than one baby “2 or 3 “ ).

Another example: if a woman is **gravida 5 para 1 +4**: she has been **pregnant for 5 times** but she had **one delivery** (one baby or more if twins 🤞 or triplets 🤞 ) and she had **4 abortions**, she is **NOT** currently pregnant ---  $> 1+4=5$  😊 .



But, if a woman is **gravid 6 para1+4** ---- > she had **one delivery**(vaginal or cesarean), **4 abortions** and she **IS currently pregnant** because she is gravid 6. So it is a very important thing to ask the lady about the details of each delivery she had 😊 .

### Extra info 😊 :

**Gravidity** indicates the number of times the woman has been pregnant, regardless of whether these pregnancies were carried to term. A current pregnancy, if any, is included in this count.

A "**nulligravida**" is a woman who has never been pregnant.

A "**primigravida**" is a woman who is pregnant for the first time or has been pregnant one time. A "**multigravida**" or "**secundigravida**" is a woman who has been pregnant more than one time.

**Parity** is the number of pregnancies carried to viable gestational age.

A woman who has never carried a pregnancy beyond 24 weeks is **nulliparous** (nullipara), A woman who has given birth once before is **primiparous** (primipara), a woman who has given birth two or more times is **multiparous** ..

### Expected date of delivery:

It is a very important thing to ask the patient about the last menstrual cycle, specifically about the **first day** of the cycle because the date of first day is used in all calculations of delivery according to what is known as **Naegele's rule**. Also you should ask her about the **length** and **regularity** of the cycle.

**Expected date of delivery:** is the day in which the woman is expected to deliver "اليوم المتوقع للولادة".

So if a lady had her menstrual cycle at (16/5/2015) when will be her expected date of delivery?  $(16+7) / (5-3) / (2015+1) \text{ ----} \rightarrow 23/2/2016$ .



Example: a lady had her menstrual cycle at 7/4/2015, her expected day of delivery is  $(7+7)/(4-3)/(2015+1) \rightarrow 14/1/2016$  .

A woman had her menstrual cycle at 27/3/2016  $\rightarrow 4/1/2017$

So, **Naegele's rule** is a standard way of calculating the expected date of delivery by **adding one year, subtracting three months, and adding seven days** to the first day of a woman's last menstrual period . 😊😊😊

Expected date of delivery is after **40 weeks** from **the last menstrual period** and in other words it is after **38 weeks** from **the time of ovulation** (in normal regular period). keep in mind that ovulation occurs 14 days before the next period ( if she has a period of 35 days then ovulation is at day 21 and so on ) .

Now, if the patient had been using **contraceptive** (especially contraceptive pills) the ovulation will not be accurate because she might have **post-pill amenorrhea or anovulation**, and you should take this into consideration when taking the history of the patient to know the expected date of delivery. If you have two patients one of them is taking contraceptives and the other is not, the calculations will be different because patients who take contraceptives have **post-pill amenorrhea** so the ovulation will be delayed 😊.

{ the “**term**” is from 37 to 42 weeks , less than 37 weeks is **preterm** , after 42 weeks is **post term** , after 40 weeks it is **post date** . important for exam 😊 }

\* According to **WHO** the viable pregnancy is beyond 24 weeks (from the last menstrual period), if the baby was born before **24 weeks** this is considered (**miscarriage or abortion**). This cutoff point is different in different countries ( in US and Britain it is almost 20 weeks) , in Jordan it is 24 weeks so if the baby was born after 23 weeks and 6 days (for example) we consider this **abortion** but if after 24 weeks we must -legally - get the pediatrician for the **resuscitation** of the baby .

## Current problems:

A very important thing for the Obstetrician is to ask the patient about the current problems, what makes her come to the clinic (is it a routine visit or a certain problem), and if there is a problem the patient should be asked about the details of that problem. So the patient should be asked about history, symptoms and problems associated with pregnancy.

Pregnancy is divided to 3 trimesters:

**First trimester** ---- > from the first day of pregnancy to the 12<sup>th</sup> week.

**Second trimester** ---- > from the 12<sup>th</sup> week to the 28<sup>th</sup> week.

**Third trimester** ---- > from the 28<sup>th</sup> week to delivery (to 42 weeks).

Why is it divided into three parts?? Because each trimester has its own problems.

For example “details are not very important”: the **first trimester** has a risk of abortion or vaginal bleeding and congenital abnormalities (so you have to screen the patient for chromosomal abnormalities, blood group and to screen for the viability of the baby).

In the **second trimester**: congenital abnormality in heart or limbs (which we can't see in the first trimester).

In the **third trimester**: you should prepare your patient for delivery so you examine the wellbeing of the baby (the normal growth of the baby ...) and wellbeing of the mother.

People think that ultrasound scan should be done in each visit to the clinic but in fact, it must be done **once** each trimester, so it is done only **three times** during pregnancy to screen for down syndrome, and in second trimester you check for congenital abnormalities like heart defects, limb problems and CNS diseases and so on.



## Surgical history:

A very important thing is to know details about surgical history because delivery of the patient is not always normal vaginal delivery, some of them may need caesarean section.

So you should know if the patient had previous caesarean section or appendectomy or any other procedure because this case will be different than a woman with a **virgin abdomen** (with no previous abdominal surgeries).

Past medical and surgical history is very important in a pregnant lady or a previously pregnant lady because this history has an impact on the course of the pregnancy, so we have to deal with women with hypertension different than women with a normal blood pressure.

In which trimester the blood pressure will be abnormal? blood pressure during pregnancy undergoes changes, for example if we measure the blood pressure for a pregnant lady in the **second trimester**, let's say in the 4<sup>th</sup> month, we expect to see **hypotension** which is normal in a pregnant lady because the venous return will become less because of the pressure of the uterus on the inferior vena cava so the cardiac output will be less and so hypotension 😊.

**History of infertility:** if a patient had been infertile for 10 years and then did an IVF (in vitro fertilization) pregnancy and became pregnant, you should deal with this patient in a different way than other patients, because the mother did not get pregnant normally but through IVF and this baby is precious 😊.

## Uterine anomalies:

sometimes patients with uterine anomalies are infertile and can't get pregnant, and if they get pregnant they might deliver the baby early (second trimester abortions) and these uterine anomalies are associated with **renal anomalies** in **30%** of cases --- > (in each three patients having uterine anomalies one of them is having renal tract anomalies like double ureter or single kidney ...)



and they might be asymptomatic so they must be screened (usually by hysterosalpingogram).

\*You should also ask the patient about any **sexual transmitted disease** (which are rare in Jordan) and it is important to know the outcome of previous pregnancies (did she have normal healthy babies or with any disorders?).

As we said you should ask about the obstetric history of the patient, were there any problems during delivery? How many abortions did she have? . Also ask her about her blood tests while she was visiting her physician, did she have anything abnormal?

Also the patient should be asked about any **previous maternal complications** (high blood pressure, diabetes and the mode of delivery (vaginal or caesarean)).

**Heart diseases:** keep in mind that the patient might have **asymptomatic** heart disease like valvular disease to a mild degree, so it will only be discovered during pregnancy, why?? because **the load** on the heart will increase , before pregnancy her heart was able to compensate but after pregnancy the blood will increase from 5 liters to 7.5 liters ( 50% increase ) , so it is a very important thing to check the patient's heart diseases ( valvular diseases or mild defects...) in order to tolerate pregnancy.

**birth weight:** the normal weight is from **2.6 to 4 kg**, if less than 2.6 the baby is **small for gestational age**, if more than 4 the baby is a **macrosomic baby** (large baby), in case of small baby the mother should be screened for hypertension or other anomalies but in case of large babies we should investigate the mothers for diabetes. {In case of twins or triplets the calculations differ}.



**Diabetes mellitus:** it is very common, patients might think that they don't have diabetes but with pregnancy and with the first visit to the physician it will be discovered (i.e. she already has diabetes but she didn't know and the pregnancy made the diabetes **overt**). Or might develop **gestational diabetes** (only during pregnancy) and these Patients usually have high risk of getting diabetes in the future ☹ .

**Epilepsy:** it is very important because usually the patients don't tell you about epilepsy if you don't ask. the patient has epilepsy and takes her medications but once she get pregnant some of these medications will become **contraindicated** ( according to their category ; A,B,C,D) and must be changed because if these medications were used they will cause congenital abnormalities ( especially in the first trimester ), so it is a very important thing to ask the patient about epilepsy specifically or the patient will forget to tell you or will not feel it is important to tell you because she is keeping her epilepsy controlled by medications . Pregnant ladies with epilepsy are at higher risk of having fits during pregnancy and their babies have high risk of getting epilepsy too ☹ .

**Thyroid diseases:** thyroid function test (for **TSH**) is a routine test for pregnant woman, we test all pregnant women for thyroid function as we test their blood hemoglobin and blood group.

**Blood group test:** if the woman has a negative blood group we should ask her about the blood group for her husband, if negative there is no problem but if positive there is a high risk of **RH isoimmunisation**. That's why they should be investigated by doing blood tests.

**Urinary tract infections :** they are very important during pregnancy , because they cause **preterm labor** and they are asymptomatic , so you must make a **urine analysis** for the patient because **3%** of patients have





**asymptomatic bacteriuria** , if you left the patient for few weeks they will have preterm labor (the baby is born before 37 weeks (ولادة مبكرة )

so before you ask the patient about her name you should test her **blood** ( if she is anemic there will be overload on heart and she will not be able to tolerate pregnancy ) , and test her **blood group**( if she was negative and had a positive baby and you didn't check her blood group she will blame you ! ) .

It is also important to screen the patient for **hepatitis**, we must test the patient for hepatitis C and B. patients with hepatitis might be asymptomatic!

It was found that hepatitis B surface antigen is present in about **11%** of pregnant women (i.e. one of each 10 pregnant ladies has hepatitis B)!!! That's why you as medical students should be vaccinated. But if you want to make a test for HIV you should ask the patient for her permission,

\* autoimmune disease, bronchial asthma and kidney diseases also should be taken into consideration.

**Psychological disorders** and depression usually occur after delivery which is known as (**post-partum blues** in 70 % of cases).


In Jordan , according to the WHO study in 2012 , about **99.1%** of women have good antenatal care by a health professional and **99%** of women deliver in hospitals ,and this is one of the indicators that reflect our good antenatal care system , other indicators are : **maternal mortality** (the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000.) in Jordan it is **19.1** which is close to the developed countries that have the **maternal mortality** ranging between 7 to 20 , while in the surrounding countries it is higher .

**Neonatal mortality** is also another indicator (The number of neonatal deaths per 1000 live births) and it is **10** in Jordan.

Remember that **Folic acid** is given routinely to all pregnant women and even 2to3 months before pregnancy. It is protective against **neural tube defects**. However, **vitamin b12** may be contraindicated in the first trimester according to recent studies.

The end ☺

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 #آخر\_شيت

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