

POSTERM PREGNANCY

&

PERINTAL MORTALITY

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Post term pregnancy:

Definitions:

--Prolonged pregnancy: is a pregnancy that advances beyond the expected date of delivery.

--Post term pregnancy: is a pregnancy that advances beyond 42 weeks calculated from the first day of the last menstrual period.

Post term pregnancy:

Physiological changes :

--Amniotic fluid:

***Progressive decrease in volume**

***Changes in L/S ratio**

***Appearance of meconium**

Post term pregnancy:

Physiological changes :

--Placenta:

***Atherotic changes of chorionic and decidua vessels with the development of hemorrhagic infarcts which become white infarcts due to calcium deposition.**

--Fetus:

***Macrosomia.**

***Intrauterine malnutrition.**

Post term pregnancy:

Fetal problems:

--Intrapartum fetal distress:

resulting from placental insufficiency and also from cord compression caused by oligohydramnious.

--Meconium Aspiration:



Post term pregnancy:

Fetal problems:

--Fetal injury:

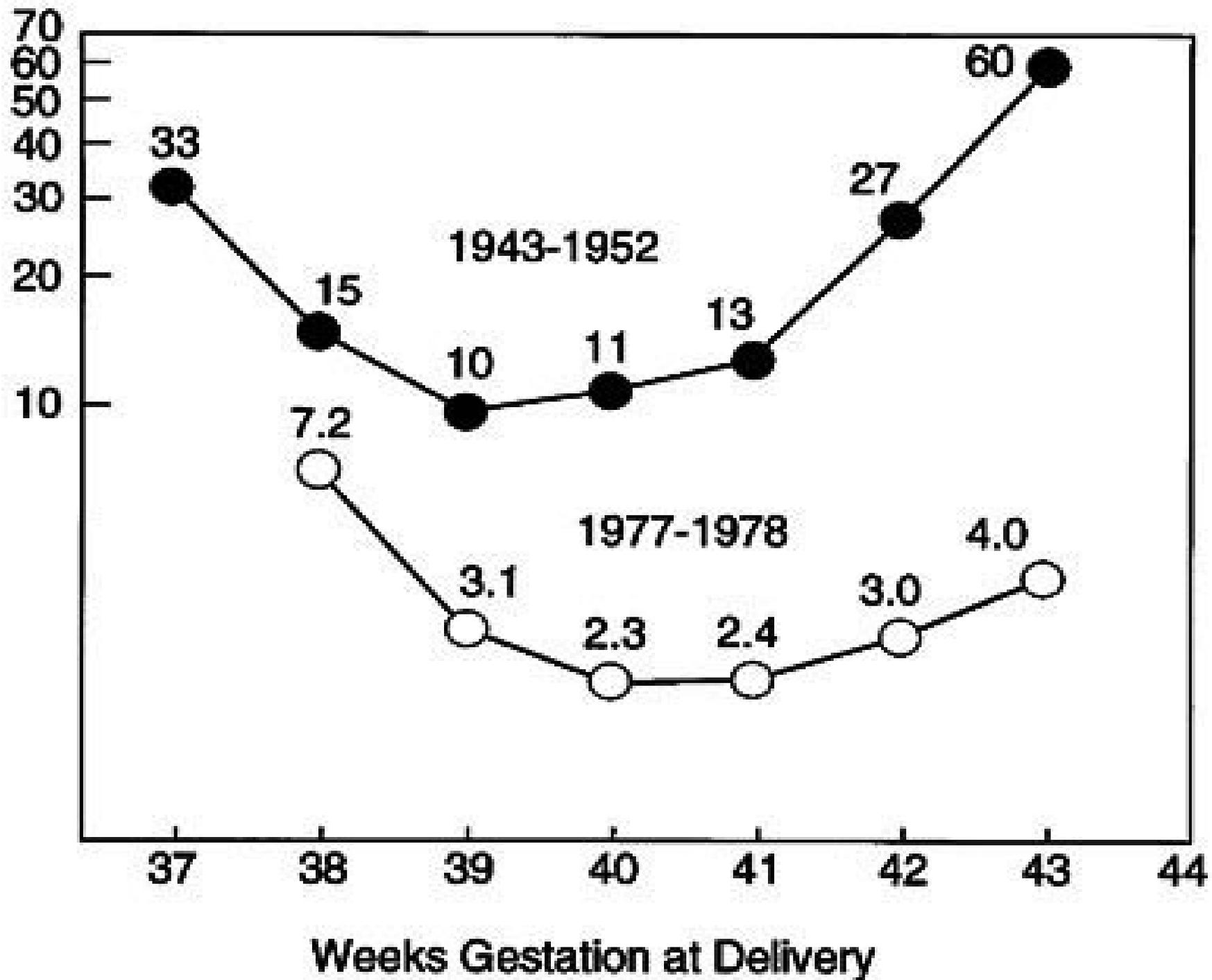
***Shoulder dystocia & brachial plexus injury**

***Fracture of the humerus or clavicle**

***Cephalhematoma & skull fractures**

***Severe asphyxia with neurological damage**

Perinatal Mortality Per 1000 Births



Post term pregnancy:

Antepartum evaluation:

--Reliability of gestational age estimation

--Ripeness of the cervix (Bishop score)

--Ultrasound evaluation

--Fetal surveillance

--Amniotic fluid analysis

--Reliability of gestational age estimation

Putting in mind that, inaccurate dating is by far the commonest etiology, so determining the reliability of the patient's dates is of utmost importance.



--Reliability of gestational age estimation

The reliability of the patient's dates is excellent if:

--The date of LMP is sharply remembered

--The patient had 3 or more regular periods before the last one and the last period was normal in amount and duration

--Reliability of gestational age estimation

--No use of oral contraceptives

--The gestational age was confirmed by US examination during the 1st trimester

if the patient's dates are unreliable the diagnosis of prolonged pregnancy is QUESTIONABLE.



--The gestational age can also be confirmed by:

--First trimester CRL(+/-7d)

--Second trimester BPD (+/- 14d)

--Doppler FHS at 10 weeks

--Quickening 16-18 weeks



Bishop score

| | 0 | 1 | 2 | 3 |
|----------------------|-----------|--------|----------|--------|
| Cervical dilation | closed | 1-2 cm | 3-4 cm | 5+ |
| Cervical effacement | 0-30 | 40-50 | 60-70 | 80+ |
| Fetal station | -3 | -2 | -1, 0 | +1, +2 |
| Cervical consistency | firm | medium | Soft | -- |
| Cervical position | posterior | mid | anterior | -- |



--Ultrasound evaluation:

US IS NOT used to determine the gestational age or the EDD but to answer questions about:

AF volume

Fetal size

Malformations



--Fetal surveillance:

- Non stress test (NST)**
- Biophysical profile (BPP)**
- Contraction stress test (CST)**

This should start at 40 weeks and is repeated at 41 weeks then twice weekly after 41 weeks:



--Amniotic fluid analysis:

Amniocentesis is done at 42 weeks to detect the presence of meconium also to determine the L/S ratio.



Post term pregnancy:

Management:

Patients who need delivery are identified:

Those with:

--ripe cervix

--decreased AF

--large sized fetus

--abnormal fetal surveillance

--high risk pregnancy

--major fetal congenital

anomalies.

Post term pregnancy:

Management:

Putting in mind that, 90-95% of normal pregnancies will spontaneously enter labor before 42 weeks Those left undelivered need frequent assessment for:

--ripeness of the cervix

--fetal status

--amniotic fluid volume.



Perinatal mortality rate (PMR):

Definition:

it is the number of stillbirths plus first week deaths per 1000 births.



Perinatal mortality rate (PMR):

Causes:

--prematurity, low birthweight (20%)

--ante partum asphyxia

--congenital defects

--birth trauma



Perinatal mortality rate (PMR):

Causes (continued):

- infections**
 - isoimmunization**
 - pulmonary hypoplasia**
 - hydrops fetalis**
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Perinatal mortality rate (PMR):

Accurate data on PMR in developing countries including Egypt is lacking, but WHO estimates a PMR between 50 and 60 compared with 7-10 in the developed countries.

It is difficult to reliably estimate PMR in our country because of very defective reporting of stillbirths and sometimes early neonatal deaths.

Perinatal mortality rate (PMR):

PMR is high in the first pregnancy, & becomes low in the 2nd and 3rd pregnancy, then PMR shows a trend of rise from the 4th pregnancy onwards. On the whole grand multiparas have high PMR that becomes seriously high by the 7th pregnancy onwards.



Perinatal mortality rate (PMR):

In developed countries many factors contribute to the improvement of the PMR including:

--improved general health

--preconceptional screening & treatment

--fewer patients with high parity

--improved antenatal, intrapartum and neonatal care.

Thank

You

