MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

CONFIRMED by
Vice-rector for scientific and pedagogical work
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THE METHODICAL RECOMMENDATIONS FOR PRACTICAL CLASS

International Faculty, Course VI

Discipline "Obstetrics and Gynecology"

Practical lesson №32. Topic: Premature breaking of pregnancy. Prolonged pregnancy. Multi-fetal (multiple) pregnancy.

Approved:

Meeting of the Department of Obstetrics and Gynecology of Odesa National Medical University

Protocol No. 1 dated August 29, 2024.

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Practical lesson №32. Premature breaking of pregnancy. Prolonged pregnancy.

Multi-fetal (multiple) pregnancy.

Learning objectives

The overall aim of this topic is to gain basic knowledge about anatomical, physiological and biochemical changes during preterm labour and delivery, be familiar with risk factors for preterm labour and delivery, acute preterm labour (obstetrics history, examination, investigations). Management of preterm labour including main part of it: establish whether threatened or 'real' preterm labour; admit if risk high; check fetal presentation; allow time for steroid administration and in-utero transfer; currently used tocolytics; mode of delivery; monitoring of labour; give IV antibiotics in labour. Methods of prediction and prevention preterm labour.

Basic concepts:

Equipment

- Multimedia equipment (computer, projector, screen), TV.
- Obstetric models and obstetric instruments (pelvimeter, obstetric stethoscope, centimeter tape).
- Professional algorithms, structural-logical schemes, tables, videos.
- Results of laboratory and instrumental researches, situational tasks, patients, medical histories.

EDUCATIONAL TIME – 4 h

I. ORGANIZATIONAL STAGE

- Greetings,
- checking attendees,
- defining of educational goals,
- providing of positive motivation.

Preterm birth is the single most important factor effecting perinatal outcomes in terms of morbidity and mortality. Preterm labor is defined by WHO as the onset of regular uterine contractions, between viability and 37 weeks' gestation, associated

with cervical effacement and dilatation. Current guidelines from many progressive countries describe a “threshold of viability’ between 22 and 26 weeks; thus preterm birth occurs between 22-26 weeks and 37 weeks’ gestation. Up to 30-40% of cases of preterm birth are iatrogenic due to deliberate induction of labour or prelabour caesarean section for conditions causing maternal or fetal compromise. The remainder of the cases of preterm birth follow spontaneous preterm labour, with or without preterm prelabour membrane rapture, and the initiating factors are the subject of much scientific interest and debate.

Multiple pregnancy is called two or more fruits. Given the large number of complications during pregnancy and in childbirth with multiple pregnancy, early identification and implementation of preventive or therapeutic measures lead ultimately to reduce maternal and perinatal mortality.

II. CONTROL OF BASIC KNOWLEDGE (written work, written testing, online testing, face-to-face interview, etc.)

2.1. Requirements for the theoretical readiness of students to perform practical classes.

Knowledge requirements:

- Communication and clinical examination skills.
- Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.
- Ability to make a preliminary and clinical diagnosis of the disease
- Ability to perform medical manipulations
- Ability to determine the tactics of physiological pregnancy, physiological labor and the postpartum period.
- Ability to keep medical records.

List of didactic units:

- definition of preterm labour and delivery,
- current concepts in the pathophysiology of preterm labour,

- risk factors for preterm labour: obstetrics history infection,demographics, psychosocil factors,
- long term prediction of preterm labour: fetal fibronectins, cervical length, inflammatory markers risk scoring systems,
- management of preterm labour: tocolysis use of corticosteroids, antibiotics,
- prevention of preterm labour: progesterone, cervical cerclage,
- obstetrics issuesin preterm labour: mode of delivery,
- care of premature neonate,
- methods of obstetrical abdominal examination: inspection, palpation, auscultation.
- Definition, etiology, and frequency of multiple pregnancies
- Diagnostics of multiple pregnancies
- Differential diagnosis
- Conducting woman with multiple pregnancies
- Delivery of multiple pregnancy
- Complications, connected to multiple pregnancy

2.2. Questions (test tasks, tasks, clinical situations) to test basic knowledge on the topic of the class.

Questions:

- Definition, etiology and frequency of multiple pregnancies.
- Diagnostics of multiple pregnancies.
- Differential diagnosis of multiple pregnancies
- Conducting woman with multiple pregnancies
- Complications, connected to multiple pregnancy
- Delivery of a multiple pregnancy
- What contains the term "miscarriage", "willful abortion"?
- What causes pregnancy loss?

- What are the risk factors for pregnancy loss?
- What is the pathogenesis of pregnancy loss?
- What is the classification of unauthorized abortions?
- What are the clinical features and diagnostic methods of threatened abortion?
- What tactics of threatened abortion?
- What are the treatments for threatened abortion?
- What methods of monitoring treatment efficacy threatened abortion?
- What are the clinical features and diagnosis of abortion in the course?
- What tactics of abortion during the?
- What are the clinical features and diagnosis of incomplete abortion?
- What tactics of incomplete abortion?
- What kind of clinic, diagnosis and management tactics complete abortion?
- What are the clinical picture, diagnosis and tactics of abortion, which never took place?
- What methods of rehabilitation of reproductive function after involuntary abortion?
- What is the definition of "habitual abortion"?
- What is the volume of surveys with the usual miscarriage?
- What are the treatments for habitual miscarriage?
- What methods of prevention are not carrying the pregnancy?
- What is the prolonged pregnancy?
- What is the management of women with prolonged pregnancy?

Test tasks

Direction: For each of the multiple-choice questions select the lettered answer that is the one best response in each case.

1. A 17-year-old G2P0 woman with no prenatal care at 29 weeks' gestation presents with painful contractions and pressure. Her cervix is 2 cm dilated, 60% effaced, and breech at –2 station. There is no evidence of ruptured membranes. Her contractions are every 3 minutes. FHT are 150 with accelerations. Maternal vital signs are temperature 36.8 degrees, pulse 96, BP 110/72. What should you do?

A. prepare for a cesarean delivery

B. observe to look for cervical change

C. give IV sedation

D. *begin tocolytic agents

E. start antibiotics

2. A 31-year-old woman (gravida 6, para 0-2-3-1) comes to you at 10 weeks' gestation with the history of having had progressively earlier deliveries, all without painful contractions. Her first child was born at 34 weeks and survived, the next delivered at 26 weeks, the next two at 22 weeks, and the last one at 20 weeks. No congenital abnormalities were found. On examination, her uterus is 10-12-weeksize, FHTs are present with Doppler, and the cervix is soft, three-quarters effaced, and 2-cm dilated. With this information, your first diagnosis is intrauterine gestation and which of the following?

A. *incompetent cervical os

B. genetic disease

C. fibroid uterus

D. premature labor

E. progesterone lack

3. A 32-year-old G2P1 presents to labor and delivery at 35 weeks of gestation, complaining of regular uterine contractions about every 5 min for the past several hours. She has also noticed the passage of a clear fluid per vagina. The external fetal monitor demonstrates a reactive fetal heart rate tracing, with regular uterine contractions occurring about every 3 to 4 min. On sterile speculum exam, the cervix is visually closed. A sample of pooled amniotic fluid seen in the vaginal vault is fern and nitrazine-positive. The patient has a temperature of 38,2°C, PR - 102, WBC of 19,000. You perform a bedside sonogram, which indicates oligohydramnios and a fetus whose size is appropriate for gestational age and with a cephalic presentation. What is the next appropriate step in the management of this patient?

A. Administer betamethasone

B. Perform emergent cesarean section

C. *Administer antibiotics

D. Administer tocolytics

E. Place a cervical cerclage

4. A child was born at a gestational age of 34 weeks. The leading symptoms were respiratory distress symptoms, namely sonorous and prolonged expiration, involving

additional muscles into respiratory process. The Silverman score at birth was 0 points, in 3 hours it was 3 points with clinical findings. Which diagnostic study will allow to diagnose the form of pneumopathy?

A. *X-ray of chest

B. Clinical blood test

C. Determination of blood gas composition

D. Proteinogram

E. Immunoassay

Typical situations of tasks:

1. A 21-year-old primigravida at 42 weeks'gestation by dates comes to the outpatient prenatal clinic. She has been seen for prenatal care since 12 weeks' gestation, confirmed by an early sonogram. She states that fetal movements have been decreasing. Fundal height measurement is 42 cm. Her cervix is long, closed, posterior, and firm. Nonstress test is reactive, but amniotic fluid index is 4 cm. What is the most probable complication of her pregnancy?

Answer: Postterm pregnancy

2. A 24-year-old woman, G2 P1, at 28 weeks'gestation by dates comes to the birthing unit complaining of regular uterine contractions every 7–10 min. She is a smoker with chronic hypertension. She has had no prenatal care. On examination her fundal height is 35 cm. Her previous pregnancy ended with spontaneous vaginal delivery at 30 weeks' gestation.

1.What is the most probable complication of her pregnancy?

2. What are the diagnostic criteria?

Answer: 1. Preterm labor.2. Pregnancy 20–36 weeks, ≥3 contractions in 30 min, Dilated ≥2 cm or changing.

3. A 21-year-old primigravida at 15 weeks'gestation is seen for a routine prenatal visit. At her last visit four weeks ago, her uterus was appropriate for size and dates. Today, her uterine fundus is palpable at the umbilicus. What is the most probable complication of her pregnancy?

Answer: Multiple pregnancy.

III. FORMATION OF PROFESSIONAL SKILLS (mastering skills, conducting curation, determining the treatment regimen, conducting a laboratory study, etc.).

3.1. Content of tasks (tasks, clinical situations, etc.).

Interactive task:

Student groups are divided into 3 subgroups of 3-4 people each. They work in the classroom, maternity ward, maternity ward, neonatal unit with pregnant women and newborns.

Task:

- Subgroup I - to determine the assessment of the newborn on the Apgar scale

- Subgroup II - to determine the assessment of fetal heart rate (auscultation and hardware methods).

- Subgroup III - to assess the responses of subgroups I and II and make adjustments.

Atypical test tasks:

1. A multipara woman was admitted to hospital with a diagnosis of multiple pregnancy. Possible complications of pregnancy and childbirth:

A. Premature detachment of normally situated placenta

B. Occipital fetal presentation

C. Acute fetal distress

D. Polyhydramnios

E. *Preterm labor

2. A patient has entered spontaneous premature labor at 28 weeks' gestation. During the vertex delivery, one should do which of the following?

A. use prophylactic forceps

B. use vacuum extraction

C. recommend epidural anesthesia to control delivery

D. *allow spontaneous vaginal birth

E. perform an episiotomy

3. A patient presents at 30 weeks' gestation in labor that cannot be stopped. Lung maturity is unlikely. Fetal lung surfactant production may be increased by a number of factors. Which of the following is proven clinically useful?

A. *glucocorticosteroids

B. prolactin

C. thyroxine

D. estrogen

E. alpha-fetoprotein

4. A pregnant woman is 28 years old. Anamnesis: precipitous labor complicated by the II degree cervical rupture. The following 3 pregnancies resulted in spontaneous abortions at the terms of 12, 14 and 18 weeks. On examination: the uterine cervix is scarred from previous ruptures at 9 and 3 hours, the cervical canal is gaping. On vaginal examination: the cervix is 2 cm long, the external os is open 1 cm wide, the internal os is half-open; the uterus is enlarged to the 12th week of pregnancy, soft, mobile, painless, the appendages are without changes. What diagnosis would you make?

A. Cervical pregnancy, 12 weeks

B. *Isthmico-cervical insufficiency, habitual non carrying of pregnancy

C. Threatened spontaneous abortion

D. Incipient abortion, habitual non carrying of pregnancy

E. Cervical hysteromyoma, habitual non carrying of pregnancy

5. A pregnant, 34 weeks gestation, is at the department of pathology. She has Rh-antibodies titer 1:32. From history, she had ectopic pregnancy with level of Rh-antibodies 1: 2 in 14 weeks. What should you do?

A. Blood transfusion

B. CTG

C. *Early delivery

D. Re-determination of antibodies in 1 day

E. Cordocentesis

6. A premature birth has been defined as a fetus born

A. *before 37 weeks' gestation

B. prior to the period of viability

C. weighing less than 1000 g

D. weighing more than 1000 g but less than 2500 g

E. none of the above

7. A primipara with twins at 38 weeks came into maternity hospital. On exam: first baby is in fooling breech presentation, the second - in oblique lie. Determine management of labor?

A. Vaginal delivery

B. Urgent caesarean section

C. Assign exercises for correction of babies presentation

D. *Planned caesarean section

E. Perform external rotation

8. A woman came to the hospital in 4 hours from the start of regular contractions. The pregnancy is 3rd , 38-39 weeks, labor is 2 nd. The size of the pelvis is normal. During external obstetric examination has found a small parts and head of fetus above pelvic inlet, there are clearly palpable two major parts of fetus, one of which is the head in the fundus of uterus. Heartbeat of fetus are clearly heard on the left below the navel, 136 beats / min and right above the navel 150 beats / min. Circumferences of the abdomen is 119 cm . The height of uterus fundus is 42 cm. The most likely component of the diagnosis?

A. macrosomia.

B. Congenital malformations of the fetus.

C. intrauterine growth retardation.

D. oligohydramnion.

E. *Twins.

3.2. Educational materials, recommendations (instructions) for performing tasks

Multiple pregnancy (the development of more than 1 fetus in the uterus during one pregnancy) is a high risk condition in obstetrics. Twins can be monozygotic (monoovular) and dizygotic (diovular). Dizygotic twins develop when two different ovocytes are fertilized by two different spermatozoids. Monozygotic twins are formed due to the division of a fertilized ovocyte at various times. The frequency of monozygotic twins is constant and is about 1:250, dizygotic - fluctuates from 1:20 to 1:150 pregnancies and depends on the race. About 75% of twins are of the same sex. Monozygotic twins have an identical genotype, blood group.

The maternal factors, promoting the development of dizygotic twins, are as follows:

- older age (35-45 years old) and parity

- tall woman with large body weight

- 0 or A blood type

- black race

- family tendency on the mother's side

- use of combined oral contraceptives before the pregnancy

- induction of ovulation and fertilization in vitro

The possibility of multiple gestation (pregnancy) increases with the use of fertilization preparations and other reproduction technologies. So, during the induction of ovulation with clomiphene-citrate, the frequency of twins is 6-8%; and with the use of exogenous gonadotrophic drugs – 25-35%. If insemination occurs in the uterine cavity, usually a couple of fertilized ovums are introduced; the frequency of multiple gestation in these cases can reach 35-40 %.

As the number of fetuses increases, the duration of the pregnancy decreases. So, if there are twins the delivery occurs on average at 37 weeks, if triplets – at 33 weeks, if there are four fetuses – at 29 weeks. For every additional fetus, the duration of the pregnancy decreases approximately by 4 weeks.

The perinatal mortality rate of twins 4-5 times exceeds the rate of single fetus pregnancies. The major reason for perinatal diseases and mortality rates during multiple gestations is premature labor. Multiple pregnancy results in the enlargement of the uterus, which exceeds the possibilities of the myometrium, placentation anomalies, congenital birth defects, and polyhydramnios. The frequency of serious anomalies is 3 times larger, than for dizygotic twins (conjoined twins, acardia), also "transfusion syndrome of twins " (placental-vascular shunt) is observed. Monoovular twins always have a smaller weight; more often, than in dizygotic twins, their intrauterine death is observed.

In modern obstetrics, the diagnosis of multiple pregnancy usually is based on data from the ultrasound. Clinical signs of multiple gestation can be:

- inadequate gestational age in comparison to the enlargement of the uterus (> 4 cm)

- excessive increase in body weight not connected with edema or excessive eating

- hydramnion

- the mother may feel increased fetal activity

- development of pre-eclampsia and eclampsia

- palpation of the uterus finds > 3 large fetal parts and numerous small fetal parts

- simultaneous auscultation of two fetal palpitation (with a difference of > 8 b.p.m. and asynchronic to the mother's)

Changes in laboratory data during a multiple pregnancy may consist of:

- abnormal elevation of the mother's chorionic gonadotropin or α-fetoprotein

- decrease in the Hb level, (iron deficiency anemia)

- hypervolemia

- increase in the frequency of disorders of glucose tolerance.

Differential diagnostics is performed with fetal macrosomia in a single pregnancy, hypervolemia, hydatidiform mole, pelvic and abdominal tumors (usually with the help of an ultrasound).

Conducting the pregnant woman. With the establishment of the diagnosis multiple gestation, antenatal management (care) should be directed on the prevention of possible complications during the pregnancy.

Complications, connected with a multiple pregnancy:

1. abortions;

2. decreased fetal weight: premature labor, intrauterine growth retardation;

3. premature labor (50% of the cases);

4. gestosis of pregnant women is seen more often, than in single pregnancy;

5. hypervolemia - frequent complication;

6. perinatal mortality;

7. development disorders;

8. fetal-fetal bleeding: hypovolemia and anemia; hypervolemia and increased blood viscosity, anomalies of the CNS;

9. hypertension caused by the pregnancy;

10. maternal anemia: acute blood loss, iron and folates deficiency;

11. placental pathologies (detachment, placental presentation);

12. hypo - and atonia of the uterus;

13. complications during labor (dystocia, weakness of labor activity, anomaly (incorrect) fetal presentation, trauma during birth, bleeding).

Even considering that the blood volume of the mother increases during multiple gestation, the expected blood loss during the delivery can increase up to 5 times. To prevent anemia, a balanced diet with iron, folate, vitamins, and microelements is recommended. To help prevent premature labor, physical activity is limited after 24-26 weeks term. For timely diagnostics of premature labor, uterine contractions are observed (pain in the sacrum, increased vaginal discharge). Tocolytics are used if necessary.

The cervix is examined to determine if it is softened and the dialation usually in 1-2 weeks. Control of the BP and urine analysis for protein is performed to reveal any possible hypertension caused by the pregnancy. At 30-32 weeks, counting the fetal movements is recommended daily. An ultrasound is performed no later than 12-16 weeks and is repeated monthly. After 30-32 weeks, if non-uniform growth is observed in the twins (20% difference in body weight), then an ultrasound is done more often.

At the end of the pregnancy, the fetal heart activity (non-stress, stress test) is monitored; biophysical profile and Doppler of blood circulation is also monitored.

The fetuses' lungs mature earlier in twins, than in single pregnancy; in necessary the amniotic fluid can be investigated by amniocentesis.

Delivery. The success of the delivery to a greater extent depends on the type of presentation of the fetuses, their gestational age and the doctor's skills. Most often there are 3 variations of presentation. 1. Both fetuses are in longitudinal position. 2. Both fetuses are in a transverse position. Even when both of the fetuses are in longitudinal position, they still can have different presentations (both have a cephalic, both in pelvic presentation, one in cephalic presentation and the second in pelvic and the other way around).

In most cases, if the first twin fetus is in cephalic (occipital) presentation, then vaginal delivery is recommended. Such labor should be performed in the operational room (indications for an abodominal delivery can suddenly arise), with the presence of an anesthesiologist and pediatrician-neonatologist. A cesarean section is performed when there are monoamniotic twins, the number of fetuses is more than two, if the body weight of the twins is less than 2500 gr., prolapse of the umbilical cord and in cases when the first fetus is not in occipital presentation. Delivery should be performed very carefully, so as to minimize injury, especially in premature twins.

Clinical course of a delivery:

- during labor the heart activity of both fetuses is monitored; the parturient woman is recommended not to lie on her back (hypotension);

- limit medicamentous analgesia and anesthesia;

- confirm the position and presentation of the fetusus with an ultrasound;

- infuse lactate Ringer solution, oxygenation therapy;

- perform an episiotomy to reduce cranial compression of the fetus;

- quickly clip the umbilical cord to prevent anemization of the second fetus for monozygotic twins;

- immediately after the delivery of the first fetus perform an internal obstetrical examination so that the presentation of the second fetus is confirmed and to see a prolapse of the umbilical cord and to determine the position and presentation of the second fetus;

- if the head or buttocks of the second fetus is fixed in the pelvis, press gently on the uterine fundus, carefully perform amniotomy with the finger over the hole (to prevent cord prolapse) and perform a vaginal delivery

- monitor the heart activity of the second fetus; if bleeding occurs or other serious problems occur (deceleration, persistent bradycardia) a caesarean section is performed;

- if the uterus does not contract within 10 min. after the delivery of the first fetus, begin to infuse oxytocin;

- if a head or buttocks of the second fetus is not fixed in the pelvis, use external manipulations and pressing on the uterus fundus to fix them; if it was successful perform a vaginal delivery;

- if external turn of the second fetus was unsuccessful and it is not possible to delivery in pelvic presentation, perform a caesarean section;

- internal turn of the second fetus on its leg can be performed only by a high-skilled obstetrician during adequate relaxation of the uterus because if not there are frequent cases of serious trauma to the fetus and uterus throughout this procedure. The best results for the fetus is to perform a caesarean section.

After the delivery of twins, the doctor should remember that immaturity, trauma and excessive manipulations during labor, which are accompanied by acute asphyxia, are the most frequent reasons for mortality.

After the birth of the second fetus, continue to introduce oxytocin (5-10 units); cautiously massage the uterus. In the postnatal period, prescribe uterotonics and prophylaxis of infectious complications.

PRETERMLABOR

OB TRIAD

- Pregnancy 20–36 weeks

- ≥3 contractions in 30 min
- Dilated ≥2 cm or changing

Preterm delivery categories include:

- Extreme preterm: <28 weeks
- Very preterm: <32 weeks
- Moderate preterm: 32–33 6/7 weeks
- Late preterm: 34–36 6/7 weeks

Risk Factors.

- Most common: prior preterm birth (PTB), short transvaginal (TV) cervical length (<25 mm), PROM, multiple gestation, uterine anomaly
- Others: low maternal pre-pregnancy weight, smoking, substance abuse, and short inter-pregnancy interval (<18 months)

Criteria that need to be met to make a diagnosis include:

- Gestational age: >20 weeks but <37 weeks
- Uterine contractions: at least 3 contractions in 30 minutes
- Cervical exam: serial examinations show a change in dilation or effacement, or a single examination shows cervical dilation >2 cm

There are conditions under which stopping labor is either dangerous for the mother and baby or futile

Obstetric: severe abruption placentae, ruptured membranes, chorioamnionitis

Fetal: lethal anomaly (anencephaly, renal agenesis), fetal demise or jeopardy (repetitive late decelerations)

Maternal: eclampsia, severe preeclampsia, advanced cervical dilation.

INTERVENTIONS TO DECREASE PERINATAL M&M

- Intravenous magnesium sulfate for fetal neuroprotection: Maternal IV
- MgSO4 may reduce the severity and risk of cerebral palsy in surviving very preterm neonates.
- Start infusion if PTB is anticipated <32 weeks gestation regardless of anticipated route of delivery.
- It takes 4 hours of infusion to achieve steady state of Mg in the fetus.

- Antenatal corticosteroid therapy for stimulation of pulmonary surfactant:

✓ A single course of corticosteroids is recommended for pregnant women with gestational age 23–34 weeks of gestation who are at risk of preterm delivery within 7 days. Use in pregnancies 34–37 weeks is controversial.

✓ A complete course is either 2 IM 12 mg doses of betamethasone given 24 hours apart or 4 IM 6 mg doses of dexamethasone given 12 hours apart.

MANAGEMENT OF PRETERM LABOR

Step 1: Confirm labor using the three criteria listed earlier gestational age, contraction frequency, cervical exam.

Step 2: Rule out contraindications to tocolysis. Do not try to prolong pregnancy if obstetric, fetal, maternal complications are present.

Step 3: Start IV MgSO4 if <32 weeks for fetal neuroprotection of cerebral palsy. Administer at least four hours before anticipated birth.

Step 4: Administer IM betamethasone if <34 weeks to stimulate fetal type II pneumocyte surfactant production. A 48-hr course is needed for full effect to take place.

Step 5: Start tocolytic therapy if <34 weeksto prolong pregnancy to allow for antenatal steroid effect. There is no benefit exceeding 48 hours. MgSO4, terbutaline, or nifedipine can be used up to 34 weeks. Indomethacin should not be used after 32 weeks due to concerns regarding in-utero closure of the PDA.

Step 6: Start IV penicill in G if <36 weeksfor GBS sepsis prophylaxis (use vancomycin if allergic to penicillin G). First obtain recto-vaginal cultures.

POST-TERM PREGNANCY

- a practical definition is pregnancy that continues ≥42 weeks or ≥294 days after the first day of the last menstrual period.
- With post-term pregnancy, perinatal mortality is increased two-to threefold. This is a direct result of changes on placental function over time.
- Macrosomia syndrome.
- Dysmaturity syndrome.

Macrosomia syndrome.

- In most patients, placental function continues providing nutritional substrates and gas exchange to the fetus, resulting in a healthy but large fetus.

- Cesarean rate is increased owing toprol onged or arrested labor.
- Shoulder dystocia is more common with risks of fetal hypoxemia and brachial plexus injury.

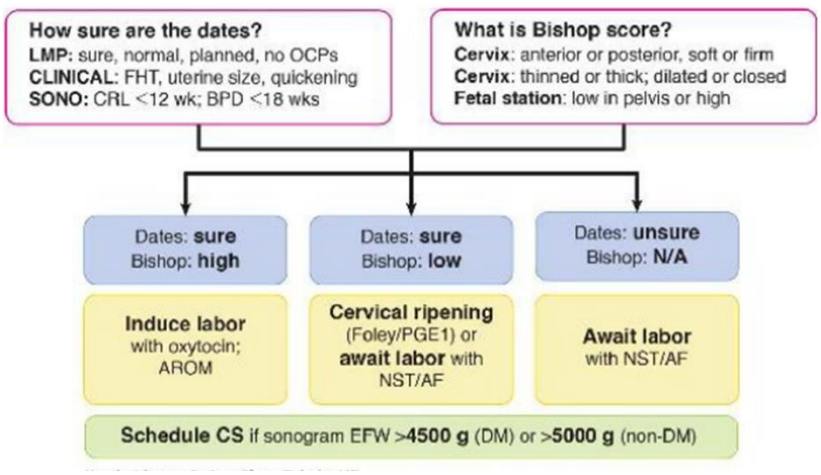
Dysmaturity syndrome.

- In a minority of patients, placental function declines as infarction and aging leads to placental scarring and loss of subcutaneous tissue. This reduction of metabolic and respiratory support to the fetus can lead to the asphyxia that is responsible for the increased perinatal morbidity and mortality.
- Cesarean rate is increased owing to nonreassuring fetal heart rate patterns.
- Oligohydramnios results in umbilical cord compression.
- Hypoxia results in acidosis and in utero meconium passage.

Management

- A Bishop score ≥8 is an accurate predictor of successful vaginal delivery with induction of labor.
- A Bishop score ≤5 is a predictor of successful vaginal delivery with induction of labor.

Parameter\Score	0	1	2	3
Position	Posterior	Intermediate	Anterior	-
Consistency	Firm	Intermediate	Soft	-
Effacement	0–30%	31–50%	51–80%	>80%
Dilation	0 cm	1–2 cm	3–4 cm	>5 cm
Fetal station	−3	−2	−1, 0	+1,+2



IV. SUMMING UP

Current control: oral examination, testing, assessment of practical skills, solving situational clinical problems, assessment of activity in the classroom.

Criteria for current assessment on the practical lesson:

5	The student is fluent in the material, takes an active part in the discussion and solution of situational clinical problems, confidently demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies, expresses his opinion on the topic, demonstrates clinical thinking.
4	The student is well versed in the material, participates in the discussion and solution of situational clinical problems, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.
3	The student isn't well versed in material, insecurely participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with significant errors.
2	The student isn't versed in material at all, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a pregnant and the interpretation of clinical, laboratory and instrumental studies.

IV. METHODICAL SUPPORT MATERIALS

1. Zaporozhan V.M., Mishchenko V.P. Obstetrics and gynaecology in 2 Books : Book 1 : Obstetrics, 2007. – 373 pp.

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5. National Institute for Health and Care Excellence (2019) Hypertension in pregnancy diagnosis and management. NICE guidelines NG133, June 25.

6. World Health Organization. Born Too Soon: The Global Action Report on Preterm Birth. Geneva: WHO, 2012.

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INTERNET SOURCES:

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- https://www.ebcog.org/
- https://www.acog.org/
- https://www.uptodate.com
- https://online.lexi.com/
- https://www.ncbi.nlm.nih.gov/
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