Emergency situations in Obstetrics and Gynecology

M. Huser

Department of Obstetrics and Gynecology LF MU and FN Brno

VSPO011p First Aid - lectures

podzim 2007
The conduct of labour – present and future

Gerychová Romana
Janků Petr
2004/2005
1. Definition

- expelling fetus, placenta, umbilical cord, amniotic fluid from the mother body during labour
- delivered fetus – newborn child with signs of life (heart rate, spontaneous breathing, movements, pulsate umbilical cord) of any weight or without signs of life with weight 1000g and more
Premature labour

24 – 36 gestational weeks

Term labour

38 – 42 gestational week

Post term labour

after 42 gestational week

until 24 gestational week - abortion
2. Labour date

- estimated data of the labour

- average pregnancy duration:
  - 40 weeks (280 days) from the last date of the menstrual period
  - 38 weeks (266 days) from the conception
Estimating labour date according

- first fetal movement
- date of the conception
- ultrasound measurement
- date of the last menstrual period
3. Classification

- spontaneous labour
- medicamental labour (spontaneous beginning)
- induced labour
- operative labour
- physiologiacal labour
- pathological labour
4. ,, Delivery tract ,, 

- hard ,, delivery tract ,, - pelvis 
- soft ,, delivery tract ,, 
  - low segment 
  - cervix 
  - vagina 
  - external 
  - pelvic floor
5. Labour force

- uterine contractions - frequency, intensity
- syntocinon, prostaglandins (E2, F2 alpha)
- abdominal press
- gravitation
6. Fetus
The most frequent fetus presentation – cephalic.
Fetus head - the biggest problem during delivery (size, shape) – influence on conduct of labour, labour outcome
Skull: two frontal bones, two parietal bones, two temporal bones, one occipital bone
Joints - frontal, saggital, lambdoid, occipital
Fontanelle – big and small
- Good prognosis - during delivery fetus head is coming into the pelvis with small oblique diameter
  (middle of the big fontanelle - 9 cm)
7. Delivery progress

- 7.1. Preparatory stadium
  - dolores praesagientes
  - preparing of uterine muscles
  - going down uterus
  - cervical slimy secretion

- Delivery beginning
  - regular uterine contractions
  - rupture of membranes

  Expectant and active conduct of labour
7.2. I. labour stage (opening)

- Latens – cervical rippening
- Active – cervical dilatation to 8 cm
- Transitory – 8 cm and more

7.3. II labour stage (expelling)

- Fetus expeling, episiotomy
  - Fetus head delivery – flexis, internal rotation, deflexis, external rotation
  - Fetus shoulders delivery
7.4. III. labour stage
expeling placenta and fetal membranes

7.5. IV. labour stage
2-3 hours after delivery

Delivery duration
6 – 12 hours (primipara)
3 – 9 hours (multipara)
60 minutes and less …..precipitous delivery
8. Delivery room incoming

- anamnesis, external examination, obstetric examination
- nonstress test, amnioscopy, ultrasound
  Doppler sonography
- blood pressure, pulse, body temperature
  blood and urine testing, vaginal cultivation
- delivery preparing (shower, bath)
9. Labour monitoring

- women status – blood pressure, pulse, body temperature, pain, psychical status
- uterine contractions – external examination and monitoring
- labour progression – internal examination
- fetus status – fetal heart rate, cardiotocography, amniotic fluid quality
- bleeding and coagulability
10. Fetal monitoring

- cardiotocography (external, internal)
- intrapartal fetal pulse oxymetry
- S–T analysis (fetal EKG)
- ultrasound examination - presentation, estimated fetal weight
- Doppler ultrasound examination – umbilical cord, haematoma
11. Conduct of labour

- doctors and midwifes role
- paediatrician and nurse
- neonatus examination and treatment
- II. and IV. stage of labour
- injury, blood loss, umbilical cord testing
genitals hygiene, blood presure and pulse,
urination, hydratation, psychic status, rest,
transfer to the rest room
- forceless delivery
- accompanied father
- home delivery
- mother position during delivery
- water birth
- elective Caesarean Section
- induced delivery
- analgesis during delivery
- relaxing technic
- musicotherapy
- aromatherapy
- backbone and perineal massage
- prelabour preparation
  - basic
  - enlarged
  - breast feeding
  - neonatal care
Obstetrics bleeding

Jelínek, J., Hudeček, R.
Obstetrics bleeding - introduction

- Spectrum ranges from small show with little clinical significance to a catastrophic haemorrhage which quickly causes to death.
- Bleeding can occur at any stage of pregnancy or labour.
<table>
<thead>
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<th>Type</th>
<th>Incidence %</th>
<th>PMRate /1000 Births</th>
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<tr>
<td>None</td>
<td>88,7</td>
<td>16,8</td>
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<tr>
<td>P. praevia</td>
<td>0,5</td>
<td>81,4</td>
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<td>Accident</td>
<td>1,2</td>
<td>143,6</td>
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<td>&lt;28 weeks</td>
<td>4,2</td>
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<tr>
<td>Other</td>
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<tr>
<td>No information</td>
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Obstetrics bleeding - summary

- Ectopic pregnancy
- Second trimester
- Placenta praevia
- Vasa praevia
- Placental abruption
- Other conditions
- Unexplained

- Postpartum haemorrhage
- Retained placenta
- Coagulopathy
- Uterine atony
- Trauma - rupture
- Long-term complications
Ectopic pregnancy - risk factors

- **High risk:**
  - tubal surgery, previous ectopic pregnancy, use of IUD, tubal pathology

- **Moderate risk:**
  - infertility, previous genital infection

- **Slight risk:**
  - cigarette smoking, previous abdominal surgery
Ectopic pregnancy - symptoms

- Abdominal pain
- Vaginal bleeding
- Abdominal and Adnexal tenderness
- History of infertility
- Use of an IUD
- Previous ectopic pregnancy
Ectopic pregnancy - diagnosis

- 5 - 9 weeks of amenorrhoea
- Pelvic pain
- Vaginal bleeding
- Positive pregnancy test hCG
- No doubling time of hCG elevation
- US - no sac is seen within the uterus
- Laparoscopy
Ectopic pregnancy - treatment

- **Surgical**
  - radical - salpingectomy
  - konzervative - longitudinal incision

- **Medical**
  - MTX
  - Prostaglandins, hyperosmolar glucose

- **Expectant**
  - monitoring of hCG levels
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Děkuji za pozornost

www.fnbrno.cz/gpk