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Emergency situations in Obstetrics and Gynecology

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VSPO011p First Aid - lecures

podzim 2007

The conduct of labour – present and future

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1. Definition

- expeling 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. Clasification

- spontaneous labour
- medicamental labour (spontaneous beggining)
- 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 freqent 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 (openig)**

  latens – cervical rippening

  active – cervical dilatation to 8 cm

  transitory – 8 cm and more

- **7.3. II labour stage (expeling)**

  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 presure, pulse, body temperature
  blood and urine testing, vaginal cultivation
- delivery preparing (shower, bath)

9. Labour monitoring

- women status – blood presure, 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 weigt
- 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 catastrofic haemorrhage which qiuckly causes to death.
- Bleeding can occur at any stage of pregnancy or labour.

Obstetrics bleeding - incidence

Type	Incidence %	PMRate /1000 Births
None	88,7	16,8
P. praevia	0,5	81,4
Accident	1,2	143,6
<28 weeks	4,2	61,0
Other	4,6	70,5
No information	0,8	21,4

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, prevoius ectopic pregnancy, use of IUD, tubal patology
- Moderate risk:
  - infertility, previous genital infection
- Slight risk:
  - cigarete 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
- Positiv pregnacy test hCG
- No dunling time of hCG elevation
- US - no suc 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