

Shock (obstetrics)

In obstetrics, we mainly encounter blood loss, which can lead to hypovolemic shock. In pregnancy, blood loss also conditions (in addition to other circulatory effects) a disorder of the uteroplacental circulation with the development of intrauterine fetal distress.

Obstetric causes of hypovolemic shock

In pregnancy

- abortion
- *mole hydatidosa*;
- ectopic pregnancy;
- *placenta praevia*;
- premature separation of the bed.

Intrapartum causes of hypovolemic shock

- *placenta praevia*
- premature separation of the bed;
- uterine rupture.

In the 3rd stage of labour

- birth injury;
- bed separation disorder;
- cotyledon retention;
- *Varicose veins of the vulva*;
- *uterine atony*;
- coagulopathy.

All other extragenital sources of bleeding should be taken into account in the differential diagnosis.

Clinical stages of shock

1st stage - compensation

The body compensates for losses of 500-1200 ml (10-25%) (by increasing cardiac output, centralizing volume, moving fluids into the intravascular space), the woman is pale, sleepy, sometimes restless. Tachycardia present, normal or slightly lower BP, diuresis is normal, shock index 1.

2nd stage - decompensation (reversible)

Losses of 25-30%, organ flow decreases (mainly through the kidneys and liver), oliguria or anuria (acute renal insufficiency) occurs. Hypotension develops, rapid to thready pulse, shock index around 1.5.

3rd stage - irreversible stage

Metabolic acidosis (lactate, acetoacetate, ...), MODS.

Treatment

General principles of stopping bleeding (operative, mediamentous). Ensuring vital functions, possibly cardiopulmonary resuscitation, release of airways (or intubation), oxygen therapy, intravenous access, shock position, temperature maintenance, permanent monitoring.

Special measures – volume replacement with crystalloid, colloid or plasma expander (Haemaceel), always transfusion in the 2nd and 3rd stages.

Links

References

- ČECH, Evžen – HÁJEK, Zdeněk – MARŠÁL, Karel, et al. *Porodnictví*. 2. edition. Grada, 2006. 544 pp. ISBN 80-247-1303-9.
- Kvadruplety vypracovaných otázek podle studijních materiálů J. Beneše, L. Mikšíka, elearningu a knihy Gynekologie a porodnictví (Martius 2005).