

Fetal pulse oximetry

Fetal pulse oximetry (FPO)^[1] is a method of fetal monitoring by determining fetal blood oxygen saturation. This is determined from the difference in the absorption of oxyhemoglobin and deoxyhemoglobin at 660 nm and 920 nm. It is measured on the fetal head during delivery.

The method makes it possible to reduce the number of cesarean sections, which would otherwise be performed unnecessarily.

Rating

In the first stage of labor, normal SpO₂ values are 59% ± 10%, in the second stage of labor 53% ± 10% .^[1].

The readings are clearly pathological if the saturation is less than 30% for 10 minutes. A single value below 10%, if measured correctly, indicates a certain pathology .

Values of around 80% or more indicate incorrect measurement (fetal blood is oxygenated by the mother, it cannot have such a saturation), measurement interference with the mother's saturation is likely^[1].

Links

Related Articles

- Fetal hypoxia
- Intrapartum fetal monitoring
- Cardiotocography
- Fetal ECG (ST-analysis)

References

1. KREJČÍ, Vratislav. *Kardiotokografie, poruchy děložní činnosti, hypoxie plodu* [lecture for subject Gynekologie a porodnictví předstátnicová stáž, specialization Všeobecné lékařství, 1. lékařská fakulta Univerzita Karlova v Praze]. Praha. 17.2.2013.

Recommended literature

- MĚCHUROVÁ, Alena. *Kardiotokografie : minimum pro praxi*. 1. edition. Praha : Maxdorf, 2012. 183 pp. ISBN 978-80-7345-274-2.