Triple test

The **triple test** is a **biochemical screening** that is performed from the blood of a pregnant woman in the **16th week** of pregnancy. It came into use in the late 1980s. It is used to detect certain fetal defects, such as NTD (cleft neural tube defects) and trisomy 21 (Down syndrome). It is currently becoming obsolete due to the relatively low detection of fetal defects - only 70% - compared to the now commonly used combined first-trimester screening with detection of defects in more than 95%.

Principle

The triple test is based on the **examination of the level of free estriol (uE3), beta hCG, inhibin A and AFP in combination with the age of the mother**.

Advantages and disadvantages

The disadvantages of this test are its **high false positive rate** and the related unnecessary stressing of the pregnant woman, even if she has a healthy fetus, and the relatively **late possibility of terminating the pregnancy** in the case of a confirmed fetal defect, i.e. after the 16th week of pregnancy. In addition to the disadvantages mentioned above, the triple test has a certain advantage, namely for pregnant women who for some reason did not have a combined first-trimester screening.

Later, the already mentioned **combined first-trimester screening** was introduced, which includes a combination of the mother's age with biochemical effects and ultrasound markers. Today, pregnant blood *free beta hCG* and *PAPP A* are examined in combination with ultrasound markers such as NT (*nasal translucency*), NB (*nasal bone*) and other soft markers such as DV (*ductus venosus*) and TR (*tricuspid regurgitation*).

Links

Related articles

- Screening (signpost)
- Prenatal diagnosis
- Detection and prevention of congenital chromosomal abnormalities
- Teratogens

References

- NICOLAIDES, K. H – A DHAIFALAH, Ishraq. *UZ screening v 11.-13+6. gestačním týdnu..* 1. edition. Olomouc : Univerzita Palackého, 2004. ISBN 80-244-0885-6..