

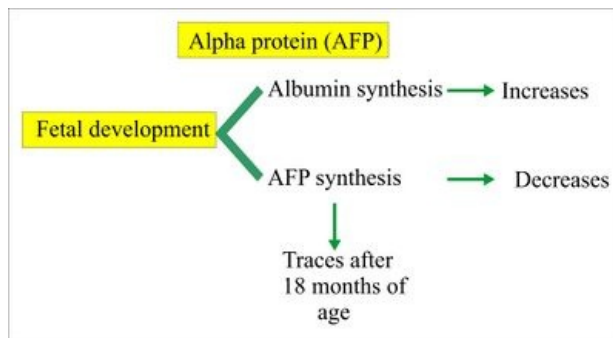
Alpha-fetoprotein

Alpha-fetoprotein (AFP, α -fetoprotein) is the major plasma protein produced by the yolk sac and fetal liver. It is also referred to as *fetal albumin* because of the similarity of its structure to albumins. After birth, its level in the serum of the newborn decreases rapidly.

It is physiologically elevated in pregnancy (up to 500 $\mu\text{g/l}$). The rise is further accompanied by pathological conditions associated with liver involvement, especially active hepatitis and cirrhosis.

Normal values in adults is **<10 $\mu\text{g/l}$** .

AFP is used as a tumor marker in nonseminomas and other germ cell tumors (testicular tumors, ovarian tumors, teratoma) and in hepatocellular carcinoma (hCC) where the sensitivity is up to 95% - screening in high-risk groups (cirrhotics, hepatitis B, etc.) and hepatoblastoma (the most common malignant liver tumour in children) is being considered.



Development of alpha-fetoprotein and albumin

Sources

Related articles

- Tumor markers

Bibliography

- SCHNEIDERKA, Petr. *Kapitoly z klinické biochemie*. - edition. Karolinum, 2004. pp. 365. ISBN 9788024606781.