

Carcinoembryonic Antigen

Carcinoembryonic antigen (CEA) represents a family of about 36 glycoproteins on the surface of cell membranes of a number of organs of ectodermal origin, particularly in the GIT. It is commonly formed in epithelial cells during fetal development. It somehow facilitates cellular adhesion during embryogenesis and indirectly immunosuppresses T-lymphocytes, but the exact function is not fully known. The half-life in the body is 7-14 days, and the normal value is up to 3 $\mu\text{g} / \text{l}$, and in smokers up to 5 $\mu\text{g} / \text{l}$.

CEA can be pathologically increased in cirrhosis and GIT inflammation. It is used as a marker of treatment success in colorectal cancer, breast cancer, pulmonary cancer, ovarian cancer, and metastatic liver disease. The decrease in CEA after the 4th week of a curative operation indicates successful treatment.

Source

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