

## **Role of adipose tissue hormones in pathogenesis and treatment of cryptoglandular anal fistula**

Cryptoglandular anal fistula is a common benign anorectal disorder that is treated mainly by surgeons. A fistula is typically defined as an abnormal communication between two epithelialized surfaces. More specifically, anal fistulae manifest as an abnormal communication between the anorectal canal and perianal skin. Cryptoglandular anal fistula is associated with low quality of life.

The main objective of studies performed currently worldwide is to identify risk factors for developing perianal fistula. It has been suggested that accumulation of adipose tissue and the abnormal secretion of adipose tissue hormones is responsible for the imbalance in the immune profile and may lead to the chronic inflammation and consequently development of anal fistula.

Management of cryptoglandular anal fistula remains a major problem in clinical practice with high costs of complex treatment, and significant economic burden to society. For these reasons, it is important to develop new diagnostic and therapeutic possibilities.

Our project aims to confirm an innovative hypothesis about the relationship of the adipose tissue accumulation and the abnormal hormonal activity of adipose tissue on the course of cryptoglandular anal fistula. Furthermore, it will indirectly answer the question whether the treatment of obesity should become a new target for the improvement of anal fistula treatment. This comprehensive and individual approach can be successful and highly appreciated by patients with fistula.

The discovery of the relationship between accumulation of adipose tissue and the abnormal secretion of adipose tissue hormones with the course of anal fistula would be a breakthrough. Since our hypotheses be confirmed, we will be able to help several patients. Perhaps in the future we will be able to control the course and severity of the disease.

The reason for our focusing on the issue is our daily work with people suffering from perianal fistula. We hope that our commitment and passion can make the life of the patients better.