## Metabolic syndrome and hormones

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Metabolic syndrome is a complex of health problems and disorders that represent a highly proaterogenic, pro-inflammatory and procoagulant condition that leads to acceleration of atherosclerosis. This is the cause of heart-vascular disease, which accounts for more than half of all premature deaths. The prevalence of metabolic syndrome is increasing significantly both in the Czech Republic, Europe and worldwide and is becoming a serious health and socioeconomic problem. Early diagnosis of MS parameters and their urgent nonpharmacological (dietotherapy, physical activity) as well as pharmacological therapy (antihypertensives, hypolipidemics, etc.) is the basis for the prevention of cardiovascular diseases and type 2 diabetes. The seminar will discuss basic endocrinopathy (thyroid hormones, glucocorticoids, DHEA and catecholamines) and their association with metabolic syndrome and obesity. Furthermore, the issue of adipose tissue and current findings of endocrine function of adipose tissue will be presented. This is a very attractive research topic, the practical use of which in clinical practice can be expected in the near future. Hormones of the digestive tract have recently become significant in the pathogenesis of obesity complications. We can influence their changes very significantly, especially by bariatric surgical procedures.