

## **Biljana Nedeljkovic- Beleslin: METABOLIC SYNDROMA**

**Summary:** Glucocorticoids are stress hormones that modulate a large number of physiological actions involved in the etiology of Metabolic Syndrome, especially obesity and insulin resistance. On the other hand, multiple signaling pathways are disturbed in abdominal obesity. In obesity, subtle activation of the hypothalamo-pituitary-adrenal (HPA) axis exist, probably sex specific. However, the most interesting aspect is change in  $11\beta$ -hydroxysteroid dehydrogenase type 1 ( $11\beta$ -HSD1) activity, which significantly contributes to pathogenesis of obesity and metabolic syndrome. Selective  $11\beta$ -HSD1 inhibitors showed that they are effective in obesity and metabolic treatment and clinical use can be expected soon.

**Key words:** Metabolic syndrome, glucocorticoid,  $11\beta$ -HSD1, obesity, adrenal, pituitary