

## Body Mass Index, Components of Metabolic Syndrome and Hyperuricemia among Women in Postmenopausal Period

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**Abstract :** In recent years, the problem of hyperuricemia is getting a particular importance due to its increased incidence in the world population. The aim of this study was to determine uric acid level in blood serum, incidence of hyperuricemia among women in postmenopausal period and their association with body mass index and some components of metabolic syndrome (triglyceride, cholesterol, systolic and diastolic pressure). We examined 412 women in postmenopausal period. They were divided in to the following groups: I group (BMI = 18,5-24,9), II group (BMI = 25,0-29,9), III group (BMI = 30,0-34,9), IV group (BMI  $\geq$  35). We determined uric acid level among women during postmenopausal period depending on their body mass index. The higher level of uric acid was found in patients with the maximal body mass index (BMI  $\geq$  35). In the I group it was 277,52  $\pm$  8,40; in the II group  $\pm$  286,81  $\pm$  7,79; in the III group  $\pm$  291,81  $\pm$  7,56; in the IV group  $\pm$  327,17  $\pm$  12,17. Incidence of hyperuricemia among women in the I group was 10,2%, in the II group  $\pm$  15,9%; in the III group  $\pm$  21,2%, in the IV group  $\pm$  34,2%. We found an interdependence between an uric acid level and BMI in the examined women ( $r = 0,21$ ,  $p < 0,05$ ). We determined that the highest level of triglyceride ( $F = 18,62$ ,  $p < 0,05$ ), cholesterol ( $F = 3,64$ ,  $p < 0,05$ ), atherogenic coefficient ( $F = 22,64$ ,  $p < 0,05$ ), systolic ( $F = 10,5$ ,  $p < 0,05$ ) and diastolic pressure ( $F = 4,30$ ,  $p < 0,05$ ) was among women with hyperuricemia. It was an interdependence between an uric acid level and triglyceride ( $r = 0,26$ ,  $p < 0,05$ ), atherogenic coefficient ( $r = 0,24$ ,  $p < 0,05$ ) among women in postmenopausal period.

**Keywords :** hyperuricemia, uric acid, body mass index, women

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