

# ANEMIA OF CHRONIC DISEASE IN PATIENTS WITH BECHTEREW'S DISEASE AS A MARKER OF SYSTEMIC INFLAMMATION

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Bechterew's Disease (BD) is a systemic disease of the connective tissue, mainly affecting the joints and ligaments of the spine and the involvement of the internal organs. 0.1 to 1% of people, mostly young and middle-aged men suffer from the BB in the general population. Anemia is the most frequent extra-articular manifestation of BD. It is diagnosed in 25-30% of patients. The main type of anemia in these patients is anemia of chronic disease (ACD). ACD occurs in patients with acute or chronic immune activation. The condition has thus been termed "anemia of inflammation."

**Objective.** To determine the relationship between hemoglobin levels and the degree of inflammatory activity in patients with BD.

**Materials and methods.** 62 patients with BD were examined. The exclusion criteria from investigation were: concomitant inflammatory visceral pathology, indications on bleeding from any site during the previous year, the positive Gregersen's reaction in feces. Methods of parametric statistics were used for the processing of the study results.

**Results and discussion.** Anemia was observed in 26 (41.9%) of 62 patients. The concentration of hemoglobin (Hb) decreases with the increase of disease activity. The level of Hb depends on the degree of disease activity. The average level of Hb in 28 patients with 1-st degree of BD activity amounted  $129.9 \pm 2.81$  g / l; in 21 patients with 2-nd degree of BD activity –  $124,9 \pm 4,55$  g / l; in 13 patients with 3-rd degree of BD activity –  $117,9 \pm 4,51$  g / l. The differences between the levels of hemoglobin in patients 1-st and 3-rd degrees of activity were significant ( $t = 2,335$ ,  $p = 0,025$ ).

In all cases the anemia was normochromic and normocytic. Also, in all cases, serum iron level was not reduced. These findings (the absence of iron deficiency and normal morphology of red blood cells) suggest that in patients with BD is observed namely ACD.

**Conclusions.** ACD is a frequent extra-articular manifestation in patients with BD. Severity of anemia depends on the degree of inflammatory activity.