

LEPTIN SERUM LEVELS IN PATIENTS AFFECTED BY SERONEGATIVE ARTHRITIS

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Leptin has an important role in the regulation of body weight and modulates immunity and inflammation. A positive feedback mechanism has been described between tumor necrosis factor and leptin, and it has been suggested that leptin potentiates inflammation in patients with rheumatoid arthritis.

Aims of this study are to evaluate leptin serum concentration in patients affected by seronegative arthritis and to compare the results with the ones obtained by healthy population.

40 patients have been recruited affected by seronegative arthritis (M:F=14:26) with an average age of 54,4 years (range 18-80), average disease duration of 3,5 years (range 1-6). Leptin concentration has been measured by ELISA method both in patients then in healthy population of 30 subjects equally divided between male and female and with same average age. The difference between the two considered groups has been analyzed using Student's test.

Leptin medium concentration has been 10,701 ng/ml with SD 9,716; while 5,358 ng/ml with SD 2,286 in healthy population. The difference between the two considered groups is significant $t=4,661$, $p<0,0001$.

The increase in leptin production during inflammation suggests that leptin is part of the cytokine cascade which governs the inflammatory-immune response and the host defense mechanism. However, both pro and anti-inflammatory effects have been described for leptin according to the experimental model investigated. New studies with other variables will be indispensable for explaining the obtained result.