

## IMMUNOLOGICAL PECULIARITIES OF THE INFECTIOUS PROCESS IN PATIENTS WITH PERIPROSTHETIC INFECTION

**Kravchun P. G., Dielievska V. Yu., Chuprun V. V., Titarenko O. P.**

*Kharkiv National Medical University, Kharkiv, Ukraine*

**The aim of the study:** to identify the criteria for the prognosis of disturbed metabolism of glucose and fat in patients with periprosthetic infection.

**Material and methods:** an immunological examination of patients with periprosthetic infection after knee and hip joint endoprosthetics (n = 14) and volunteers (n = 20) was conducted.

**Results:** the patients with periprosthetic infection were characterized by cholestasis, increased atherogenesis, anemia, impaired glucose tolerance, increased circulating immune complexes, autoimmune granulocytotoxic antibodies, IgM, IgG, IgA and sensitization to synovial membrane and *Staphylococcus aureus*.

In patients intolerance to glucose was associated with autoimmune lymphocytotoxic antibodies and decreased production of LiF and to the antigens of synovial membrane. Atherogenesis was associated with high level of autoimmune lymphocytotoxic and granulocytotoxic antibodies, circulating immune complexes, decreased LIF and sensitization to connective tissue antigens and pathogenic microorganisms, especially to *Streptococcus* and *Proteus*. Decreased hemoglobin was associated with increased autoimmune lymphocytotoxic antibodies, delayed-type sensitization to bone and cartilage tissue, to *Staphylococcus* and sensitization by accelerated type to *E. coli* and *Proteus*.

**Conclusions:** immunological data might be useful in prophylaxis of anemia, intolerance to glucose and impaired metabolism of fat tissue in patients with periprosthetic infections.