



PLATE-RICH PLASMA IN TREATMENT POSTTRAUMATIC KNEE CHONDROPATHY

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Abstract

The knee joint is the largest joint in the human body. Since it experiences significant static and dynamic mechanical stress, and has a complex anatomical structure, various injuries of the knee joint are extremely common. According to various authors, they account for 50-70% of all injuries of the musculoskeletal system. Post-traumatic chondropathy (chondromalacia) is characterized by the presence of hyaline cartilage defects of different depth, localization and area in patients who have suffered a knee injury. The incidence of this pathology varies from 51 to 66% according to arthroscopy data.

Key words:

Knee joint, knee injury

Objectives.

To improve the results of complex treatment of patients with posttraumatic chondropathy of the knee joint using intraarticular injections of platelet-enriched plasma.

Methods.

Treatment results of 55 patients who had undergone different traumas of the knee joint with the arthroscopically verified diagnosis "posttraumatic chondropathy" were studied. Intraarticular injection of platelet-enriched plasma was used in the treatment of 31 patients with posttraumatic cartilage defects in the knee joint. The control group included 24 patients with posttraumatic chondropathy who were not injected platelet-enriched plasma. To evaluate treatment efficacy, besides clinical investigation methods, we used the evaluation scale of outcomes of injuries and diseases of the knee joint - KOOS 2 and 6 months after the course of treatment.

Results.

The performed research has shown that 6 months after the course of the intraarticular injection of platelet-enriched plasma, the patients were characterized by reliably higher indexes of subscales "symptoms" ($p < 0,01$), "function in daily living" ($p < 0,01$), "function in sport and recreation" ($p < 0,01$) and "knee-related quality of life" ($p < 0,01$) and summarized index on the KOOS scale ($p < 0,01$) if compared with the patients of the control group. We haven't revealed any side-effects and complications while applying this method of treatment.

Conclusions.

Using platelet-enriched plasma for intraarticular injections permits to improve significantly the indexes of the functional state of the knee joint as well as the life quality of patients with posttraumatic chondropathy. This method is up-to-date, effective and simple in use and is promising for treatment of the given pathology.

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