Prevention the Cartilage Destruction by Arthroscopic Knee Synovectomy in Rheumatoid Arthritis

Marina Lipina', Maxim Makarov, Sergey Makarov
Institute of Rheumatology, Russia
E-mail: marli-05@mail.ru

Abstract: Knee arthroscopic synovectomy is the most popular surgery treatment for resistant knee synovitis in patients with rheumatoid arthritis. In rheumatoid arthritis surgical removal of inflammation help to reduce the amount of aggressive factors of joint destruction. The opportunity to perform such traumatic knee surgery with small surgical tools and small cuts without arthrotomy is a great chance to prevent joint destruction.

OBJECTIVE: to identify the role of arthroscopic synovectomy in reduce progression of knee destruction

DESIGN: we examined the rate of markers cartilage and bone destruction (COMP, CTX-I, CTX –II, MMP-3) before surgery and 3, 6, 12 month after surgery using ELISA. Assessment of the prognostic significance of markers was made by ROC- curve analysis.

RESULTS: 138 KAS for 115 were made. Before surgery, disease activity was high: 12.7 ± 5.4 in Routine Assessment of Pain Index Data (RAPID-3). The rate of markers was very high before surgery and slowly decreased from 6 to 12 months after surgery. Prognostic role in progression of cartilage destruction and formation of erosions during inflammatory arthritis had only high rate of MMP-3 in serum before surgery.

CONCLUSION: fastest way to prevent joint destruction and initiate early treatment is determining the progression of cartilage destruction on early stages, before the appearance of radiologic signs, by the definition in serum the rate of markers of cartilage and bone metabolism.

Key words: rheumatoid arthritis, synovectomy, joint destruction