PLATELET RICH PLASMA IN TREATMENT OF HAND AND WRIST OSTEOARTHRITIS

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Abstract

Introduction: The purpose of this study was to evaluate Platelet Rich Plasma (PRP) injection into the wrist and hand osteoarthritis. A systematic review was performed with the available literature.

Materials and methods: We used PubMed and Medscape research engines to look for publications relating to Platelet Rich Plasma and Treatment of Hand and Wrist Osteoarthritis. We have found only few specialized articles on this subject.

Results: In total, only four articles, on this specific issue were found. Other articles related to the treatment of distal radius fractures with PRP injections were excluded from this review and are the subject of another study dealing with PRP administration in acute disease (fractures).

Two of the four articles are very general studies, showing the PRP injection procedure, the third one describes the Surgical Alternatives for thumb osteoarthritis: carpometacarpal (CMC) joint or trapeziometacarpal (TMC) joint versus Non-surgical options for thumb arthritis (PRP). The last study (the fourth) is a pilot study about Leukocyte-Reduced Platelet-Rich Plasma Treatment of Basal Thumb Arthritis. The report is about 10 patients with (TMC) joint osteoarthritis. They were treated with 2 intra-articular PRP injections in 4 weeks apart. Patients were evaluated after 3 and 6 month. It was found that grip was unaffected but pinch was declined after 6 months.

Conclusions: 1. There are few studies about the use of PRP in chronic disease (osteoarthritis) of wrist and fingers, improvement was shown only in the treatment of Trapeziometacarpal (TMC) arthritis and partly in Kienbok disease (lunatomalacia).
2. In chronic disease PRP is effective only when used in the incipient stages (stage 1or 2). In the late stages (stage 3 or 4) surgical treatment is recommended.