PLATELET RICH PLASMA FOR THE TREATMENT OF RADIAL AND MEDIAN NERVE INJURY

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Abstract

Introduction: Studies have already attempted the utility of Platelet Rich Plasma (PRP) injection in several different diseases, such as: nerve section, peripheral nerve repair, spinal fusion, bone formation, chondropathys, ostheoarthritis, lateral epicondylitis, muscle, ligament or tendon injures, skin wounds, and others. The purpose of this review was to investigate the effect of the PRP injection in radial nerve section and median nerve compression.

Materials and methods: A systematic review was performed with the available literature, in English language, published in the last 7 years (2011-2018).

Results: The search in the PubMed, Medscape and Scopus database identified 8 articles about this specific issue. However, in trauma cases, only one study was found about radial nerve section (a recent 2018 case report). Regarding the compression of the median nerve (carpal tunnel syndrome, CTS), there were found 7 articles, including 115 patients, with mild to moderate (CTS) separated into 2 groups: 58 patients (PRP group, who received a single injection of PRP) and 57 patients (control group, who did not receive this treatment). In some articles, the evaluation was made after one month, in others at 1.3 and 6 month post-injection.

Conclusions: 1. In case of radial nerve section, after nerve sutured, PRP infiltration has the potential to enhance the healing process of radial nerve palsy.
2. PRP is a safe modality that relieves pain and improves disability (functionality) at the patient with mild to moderate (CTS).