



## AB120. 205. Systematic review of platelet-rich-plasma for partial rotator cuff tears

Geoff Crozier-Shaw, Eoin Nolan, Ara Francis, Patrick Kenny, Peter Keogh, Olivia Flannery

Department of Orthopaedics, Connolly Hospital, Blanchardstown, Dublin, Ireland

**Background:** Intra-articular injections are part of treatment for rotator cuff pathology when conservative measures fail. Novel techniques like platelet-rich-plasma (PRP), are currently being applied for these injuries. PRP contains growth factors like VEGF and PDGF. These are thought to be significant in tissue healing. We aim to carry out a systematic review of the literature on the use of PRP for partial rotator cuff tears.

**Methods:** A systematic review was carried out. Pubmed Central, EMBASE and the Cochrane review of RCTs were searched. Search terms: “platelet-rich-plasma, rotator cuff tear, partial”. Inclusion criteria: RCT, partial rotator cuff tears. Exclusion criteria: not PRP, no control group, not

partial rotator cuff tear, not English. Control groups were either cortico-steroid injection or dry needling. Endpoints were not homogenous across the literature. Outcomes included: Visual Analogue Score (VAS), American Elbow and Shoulder Surgeons Standard Shoulder Assessment (ASES) and Shoulder Pain and Disability Index (SDPI).

**Results:** Initial search yielded twenty-five results (n=25). After duplicates were removed, there were fifteen unique studies. Two RCTs (n=2) were selected for analysis after exclusion criteria were applied.

**Conclusions:** While initial data is promising, there is no level 1 evidence for intra-articular PRP for partial rotator cuff tears. Clinical improvements noted do not eliminate the need for high-quality, multi-centre, randomised, double-blinded trials to assess the efficacy of this treatment. More objective measures for measuring efficacy need to be applied also e.g., MRI improvements.

**Keywords:** Platelet-rich-plasma (PRP); treatment; rotator; cuff; tear

doi: 10.21037/map.2018.AB120

**Cite this abstract as:** Crozier-Shaw G, Nolan E, Francis A, Kenny P, Keogh P, Flannery O. Systematic review of platelet-rich-plasma for partial rotator cuff tears. *Mesentery Peritoneum* 2018;2:AB120. doi: 10.21037/map.2018.AB120