

PubMed

Full text links



Format: Abstract

*J Orthop Surg (Hong Kong)*. 2015 Apr;23(1):6-10.

## Leukocyte-poor platelet-rich plasma versus bupivacaine for recalcitrant lateral epicondylar tendinopathy.

Behera P<sup>1</sup>, Dhillon M, Aggarwal S, Marwaha N, Prakash M.

### Author information

### Abstract

**PURPOSE:** To compare a single leukocyte-poor (type-4B) **platelet-rich plasma** (PRP) injection versus bupivacaine injection for recalcitrant lateral epicondylar tendinopathy (LET).

**METHODS:** 25 patients aged 27 to 50 years with painful and recalcitrant LET of the humerus were randomised to receive leukocyte-poor (type-4B) PRP (n=15) or bupivacaine (n=10) injection. Outcome measures included visual analogue scale (VAS) for pain, modified Mayo clinic performance index for **elbow** (MMCPPIE) for **elbow** function, and Nirschl score for activity-related pain at 1, 3, 6, and 12 months by a single assessor.

**RESULTS:** At baseline, the PRP and bupivacaine groups were comparable in terms of age, sex, duration of symptoms, VAS for pain, MMCPPIE score, and Nirschl score. After one month, the percentage of improvement was less in the PRP than bupivacaine group in terms of the VAS for pain (17.7% vs. 26.5%), MMCPPIE score (24.0% vs. 27.6%), and Nirschl score (20.7% vs. 31.1%). Nonetheless, improvement in the respective scores was greater in the PRP than bupivacaine group after 3 months (42.5% vs. 30.9%, 34.1% vs. 27.2%, and 50.7% vs. 39.6%), 6 months (67.3% vs. 20.1%, 40.6% vs. 16.3%, and 71.4% vs. 31.1%), and one year (83.2% vs. 45.6%, 47.0% vs. 21.7%, and 76.6% vs. 56.3%). The differences in scores between groups were significant at 6 months and one year only (p<0.001).

**CONCLUSION:** Leukocyte-poor (type-4) PRP injection for recalcitrant LET enabled good improvement in pain and function.

**KEYWORDS:** **platelet-rich plasma**; tennis **elbow**

PMID: 25920634 DOI: [10.1177/230949901502300102](https://doi.org/10.1177/230949901502300102)

[Indexed for MEDLINE]

## Publication types, MeSH terms, Substances

### Publication types

[Comparative Study](#)

[Randomized Controlled Trial](#)

### MeSH terms

[Adult](#)

[Anesthetics, Local/administration & dosage\\*](#)

[Bupivacaine/administration & dosage\\*](#)

[Female](#)

[Glucocorticoids/administration & dosage\\*](#)

[Humans](#)

[Injections](#)

[Male](#)

[Middle Aged](#)

[Platelet-Rich Plasma\\*](#)

[Tennis \*\*Elbow\*\*/diagnostic imaging](#)

[Tennis \*\*Elbow\*\*/therapy\\*](#)

[Ultrasonography](#)

### Substances

[Anesthetics, Local](#)

[Glucocorticoids](#)

[Bupivacaine](#)

## LinkOut - more resources