

& R P S D U L V R Q E H W Z H H Q S O D W H O H W U L F K S O D V P D D Q G K \
O H V L R Q V \$ Q H W Z R U N P H W D D Q D O \ V L V R I U D Q G R P L] H G F



Taipei Medical University Hospital, Taiwan

Introduction & Purpose: Both platelet-rich plasma (PRP) and hyaluronic acid (HA) with or without surgical intervention enhance healing and improve function in talar OCLs. However, recent studies on OCLs have not thoroughly investigated effects among PRP, HA and conventional treatment. The purpose is to synthesize evidence by comparing the effects (on pain and foot and ankle condition scores) among PRP, HA and conventional treatment strategies for talar OCLs.

Material & Methods: All relevant research articles were included using related terms in the PubMed, EMBASE, Web of Science Direct and Cochrane library databases from their inception to June 2017. The screening criteria for this review were as follows: Randomized controlled trials (RCTs) that compared PRP with HA, PRP with control and control in patients with talar OCLs. The risk of bias in the included studies was assessed using the Cochrane Risk of Bias Tool. Data were extracted and recorded as weighted mean difference (WMD) and their standard deviations (SDs), confidence intervals (CI), consistency I^2 and I^2 for continuous data in the network meta-analysis.

Result: A total of 1199 references were identified, of which 10 RCTs were included in the final synthesis. A total of 197 patients were randomized into the PRP, HA and control groups. PRP caused higher reductions in the visual analog scale (VAS) than HA and conventional treatment and the WMDs were 1.109 (95% CI: -1.716, -0.502) and -2.301 (95% CI: -2.801, -1.801). Moreover, PRP improved the American Orthopedic Foot and Ankle Society score more than the other treatment modalities and the WMDs were 12.448 (95% CI: 7.224, 17.672) and 18.617 (95% CI: 13.536, 23.698).

Conclusion: PRP reduced pain and improved ankle conditions to a greater extent than HA and conventional treatment. Therefore, PRP might be recommended for the treatment of talar OCLs. Further investigation is required to guarantee the safety and efficacy of different surgical treatments.

a4910131@gmail.com