Injection treatments for patellar tendinopathy.
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Abstract

OBJECTIVE: Injection treatments are increasingly used as treatment for patellar tendinopathy. The aim of this systematic review is to describe the different injection treatments, their rationales and the effectiveness of treating patellar tendinopathy.

METHODS: A computerised search of the Medline, Embase, CINAHL and Web of Knowledge databases was conducted on 1 May 2010 to identify studies on injection treatments for patellar tendinopathy.

RESULTS: 11 articles on seven different injection treatments (dry needling, autologous blood, high-volume, platelet-rich plasma, sclerosis, steroids and aprotinin injections) were found: 4 randomised controlled trials (RCTs), 1 non-RCT, 4 prospective cohort studies and 2 retrospective cohort studies. All studies reported positive results. The Delphi scores of the four RCTs ranged from 5 to 8 out of 9. Different and sometimes contradictory rationales were used for the injection treatments.

CONCLUSION: All seven different injection treatments seem promising for treating patellar tendinopathy. Unlike the other injection treatments, steroid treatment often shows a relapse of symptoms in the long term. Results should be interpreted with caution as the number of studies is low, few high-quality studies have been conducted and the studies are hard to compare due to different methodology. More high-quality studies using the same cross-cultural reliable and valid outcome measure are needed, as well as further research into the pathophysiology. Finally, some implications are provided for clinicians who want to use injection treatments as a part of their treatment for patellar tendinopathy, distinguishing between reactive and degenerative phase of patellar tendinopathy.

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