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# Prolotherapy for Osteoarthritis and Tendinopathy: a Descriptive Review

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## Abstract

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### **Purpose of Review**

Osteoarthritis and overuse tendinopathy are common chronic conditions of high societal and patient burden. The precise etiology of pain and disability in both conditions is multifactorial and not well understood. Patients are often refractory to conservative therapy. The development of new therapeutic options in both conditions is a public health priority. Prolotherapy is an injection-based outpatient regenerative therapy for chronic musculoskeletal conditions, including osteoarthritis and tendinopathy. The authors reviewed the basic science and clinical literature associated with prolotherapy for these conditions.

### **Recent Findings**

Systematic review, including meta-analysis, and randomized controlled trials suggest that prolotherapy may be associated with symptom improvement in mild to moderate symptomatic knee osteoarthritis and overuse tendinopathy.

## Summary

Although the mechanism of action is not well understood and is likely multifactorial, a growing body of literature suggests that prolotherapy for knee osteoarthritis may be appropriate for the treatment of symptoms associated with knee osteoarthritis in carefully selected patients who are refractory to conservative therapy and deserves further basic and clinical science investigation for the treatment of osteoarthritis and tendinopathy.

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**Recently published papers of particular interest have been highlighted as: • Of importance •• Of major importance**

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## Ethics declarations

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### Conflict of Interest

Dr. Rabago is president of the Hackett Hemwall Patterson Foundation, a non-profit (501c3) organization that provides prolotherapy teaching and service. Dr. Nourani has

nothing to disclose.

## Human and Animal Rights and Informed Consent

This article does not contain any studies with human or animal subjects performed by any of the authors.

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