

SHOULDER TENDINOPATHY INDUCED BY STATINS: SYSTEMATIC REVIEW AND CASE REPORT

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Background and Aims

Statins are widely used to manage cholesterol levels, but their use can lead to musculo-skeletal side effects, including tendinopathy of the shoulder. Among these, Rotator Cuff Disease (RCD) is one of the most prevalent forms of shoulder tendinopathy. Here we present a clinical case of statin-induced RCD and a systematic review on the association between statins and shoulder tendinopathy.

Methods

A systematic review was conducted following PRISMA guidelines, utilizing databases such as PubMed, Web of Science, and SCOPUS. Additionally, the case of a 49-year-old male patient with statin-induced RCD is reported. The patient was treated with a individual rehabilitation project (IRP) that included steroid and hyaluronic acid (HA) injections, mesotherapy, and therapeutic exercises.

Results

From an initial pool of 217 articles, three cohort studies met the inclusion criteria for the systematic review. The findings revealed conflicting evidence regarding the relationship between statins and shoulder tendinopathy. In the case report, symptoms improved after reducing the statin dose and implementing a multimodal personalized IRP.

Conclusion

Statins may contribute to tendon injuries by disrupting extracellular matrix composition and cell membrane integrity. Although the association between statins and tendinopathy remains debated, clinicians should monitor patients for signs of tendinopathy and consider alternative treatments if symptoms develop. This case report demonstrated that a multimodal personalized IRP can effectively manage statin-induced RCD. Further research is required to elucidate the relationship between statins and shoulder tendinopathy. Early diagnosis and individualized treatment strategies are critical for optimizing patient outcomes.

Keywords: Statins, Tendinopathy, intra-articular-injections, mesotherapy, therapeutic-exercise