The management of turf toe – A systematic review

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Introduction: Turf toe is used to describe an injury occurring at the plantar aspect of the metatarsophalangeal-sesamoid complex of the hallux. Typically seen in athletes, it occurs due to hyper-dorsiflexion and axial loading of the hallux metatarsophalangeal joint with the foot fixed in equinus. The injury causes pain and joint instability, missed athletic activity and potentially ends careers. Turf toe can be managed conservatively or operatively, with controversy regarding the indications for operative intervention.

Aim: This study aims to conduct a systematic review to determine whether and in what circumstances operative intervention is superior to conservative management of turf toe in adults.

Methods: A systematic review of the literature was performed using PubMed, Embase, Cochrane and Scopus databases. The search terms used were turf toe, first metatarsophalangeal joint injury, conservative, non-operative, and operative. All articles published in English reporting on the management of turf toe were reviewed. The primary outcome measure was the time to return to pre-injury activity with the secondary outcome of the time to symptom resolution.

Results: Seven studies met the inclusion criteria. Three patients were successfully managed conservatively returning to athletic activity on average at 12 weeks. 17 patients underwent surgical intervention with an average return to athletic activity at 18 weeks.

Conclusion: Operative intervention was shown to give a successful outcome in patients with grade three turf toe injuries or those who have failed conservative management. However, there is insufficient evidence to determine whether operative intervention is superior to conservative management.

Biography
Louis Hainsworth completed his undergraduate degree at Peninsula Medical School and is pursuing MSc at University of Edinburgh. He has served as the Deputy of Res Medica since 2009.

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