

Ankle Ligaments on MRI: Appearance of normal and injured ligaments

Thesis

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By

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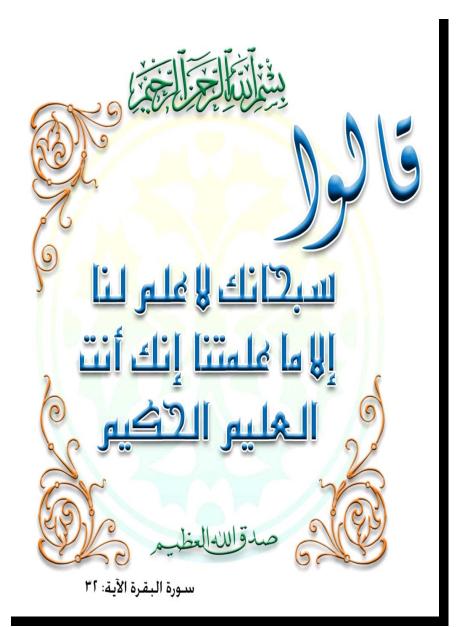
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Abbrev. Full-term

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Introduction

The ankle ligaments stabilize the bones of the hindfoot during motion, guide and constrain the complex movement of these bones with respect to the leg and midfoot bones, and transmit motion from one hindfoot bone to another. Bones and ligaments, together with the joint capsule, are functionally linked to form the hindfoot joint complex (Guillo et al., 2013).

The foot and ankle are among the most difficult anatomic sites to image, simply because of the angle formed between the foot and ankle. Even the terminology for plane orientation in the foot and ankle is confusing and certainly not universal (*Helms et al.*, 2009).

The most common clinical presentation of patients with ankle and foot pathology is pain and swelling followed by pain alone who attends the musculoskeletal clinic or orthopedic department. This leads to disability in performing regular normal activities (*Kumar et al., 2017*).

Clinical examination may be difficult in the immediate period following an acute injury. If there is concern for a ligamentous ankle injury, consideration can be given to delaying a definitive examination for up to 5 days as this permits the partial resolution of swelling and inflammation.