

Weight-bearing computed tomography in the identification of intercuneiform instability in Lisfranc lesion: a case report

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Lisfranc lesions have a high rate of diagnostic failure (> 30%), especially in isolated ligament injuries. Diagnostic delay is associated with chronic pain and instability of the middle foot. Weight-bearing computed tomography (WBCT) emerges as a promising tool. The objective of this report is to present a case in which this modality of examination identified intercuneiform instability not detected by conventional methods. Evaluation of a female patient, a marathon runner, with a Lisfranc injury after falling down stairs. Performed: weight-bearing radiography, comparative bilateral conventional tomography and weight-bearing computed tomography. Surgical exploration with evaluation under intraoperative radioscapy. Conventional examinations identified C1-M1, C1-M2, C2-M2 instability and plantar avulsion at the base of the second metatarsal. Weight-bearing computed tomography additionally showed intercuneiform asymmetry (C1-C2, which was not detected in the stress test under intraoperative radioscapy. Surgical exploration confirmed this instability, modifying the planning. Fixation performed with cannulated screws 3.5 mm and a dorsal plate. Weight-bearing tomography represents an advance in the diagnosis of Lisfranc lesions, especially hidden instabilities. When unavailable, systematic intraoperative exploration is indispensable for complete diagnosis and appropriate treatment.

Keywords: Foot injuries; Metatarsal bones; Tomography, X-Ray Computed; Weight-bearing.

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