

Occult tibial plateau fracture

Naoki Yoshida, Yoshihiko Tsuchida

Department of Orthopedic Trauma Surgery, Shonankamakura General Hospital, Kanagawa, Japan

Correspondence to

Dr Naoki Yoshida,
n_yoshida@shonankamakura.or.jp

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DESCRIPTION

An 86-year-old woman presented to the emergency department with diffuse left knee pain from a fall from standing height. Anteroposterior and lateral X-ray of the left knee revealed no evidence of a fracture (**figure 1A**). However, MRI study revealed left tibial plateau fracture (coronal T2-weighted fast field echo imaging (**figure 1B**) and coronal proton density-weighted fast spin echo imaging (**figure 1C**)). She was hospitalised for severe left knee pain and was given restrictions on weight-bearing activity for 2 weeks. She achieved good functional outcomes at a 6-month follow-up.

Occult tibial plateau fractures are not be easily diagnosed on a radiograph. For occult tibial plateau fractures, non-operative conservative therapy should be a first-line treatment.¹ However,

Learning points

- ▶ Occult tibial plateau fractures may not be easily diagnosed on a radiograph.
- ▶ MRI studies should be performed in patients with a suspected tibial plateau fracture.

these fractures can cause severe sequelae if they are not properly diagnosed and rapidly treated.² When this occurs, patients may waste time and money compared with appropriate treatment. To prevent potential severe adverse events, MRI studies should be performed in patients with a suspected tibial plateau fracture.³

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Figure 1 (A) An anteroposterior projection of left knee demonstrated no evidence of fracture. (B) MRI (coronal T2-weighted fast field echo imaging) revealed left tibial plateau fracture. (C) MRI (coronal proton density-weighted fast spin echo imaging) revealed left tibial plateau fracture.

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