

# Knee Dislocation

## *Luxação do Joelho*

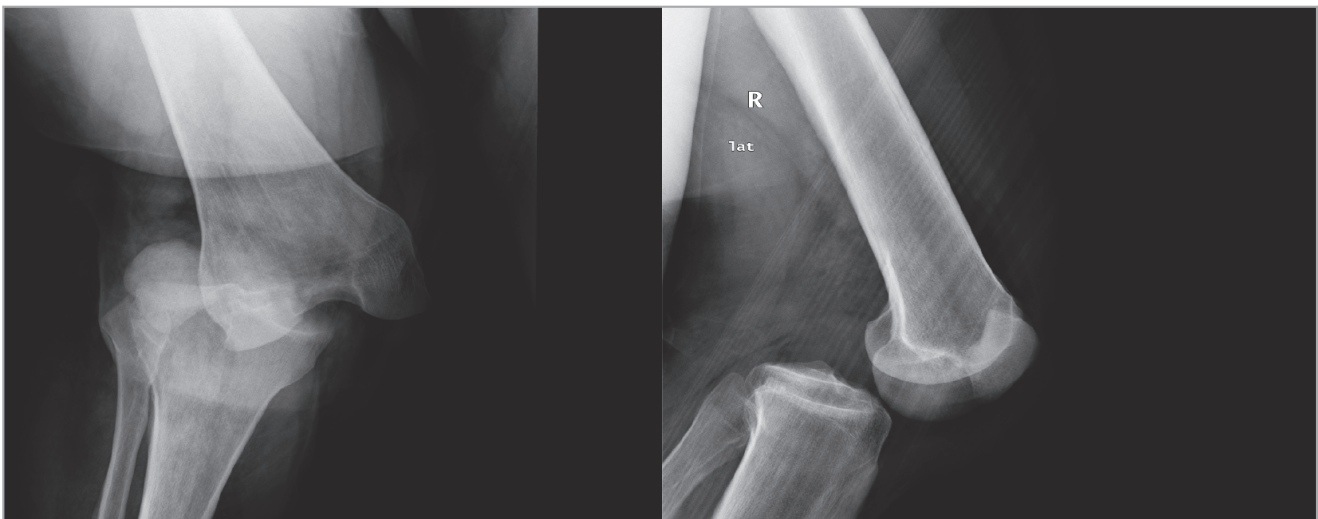
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**Palavras-chave:** Luxação do Joelho/diagnóstico; Luxação do Joelho/diagnóstico por imagem

An obese 28-year-old man suffered a hyperextension injury of the right knee after falling from a height of 1.5 m and landing on his feet. On admission to the emergency

department, an obvious deformity and swelling of the right lower limb was noticed, with palpable ankle pulses, absence of foot drop or sensory changes in the distribution of the common peroneal and tibial nerves. Anteroposterior and lateral radiographs confirmed a posterior dislocation of the knee (Kennedy classification) (Fig. 1). Prompt reduction and immobilization with DePuy knee protector orthoses was performed (Fig. 2).



**Figure 1** - X-Ray AP and Lat view of right knee showing posterior dislocation.

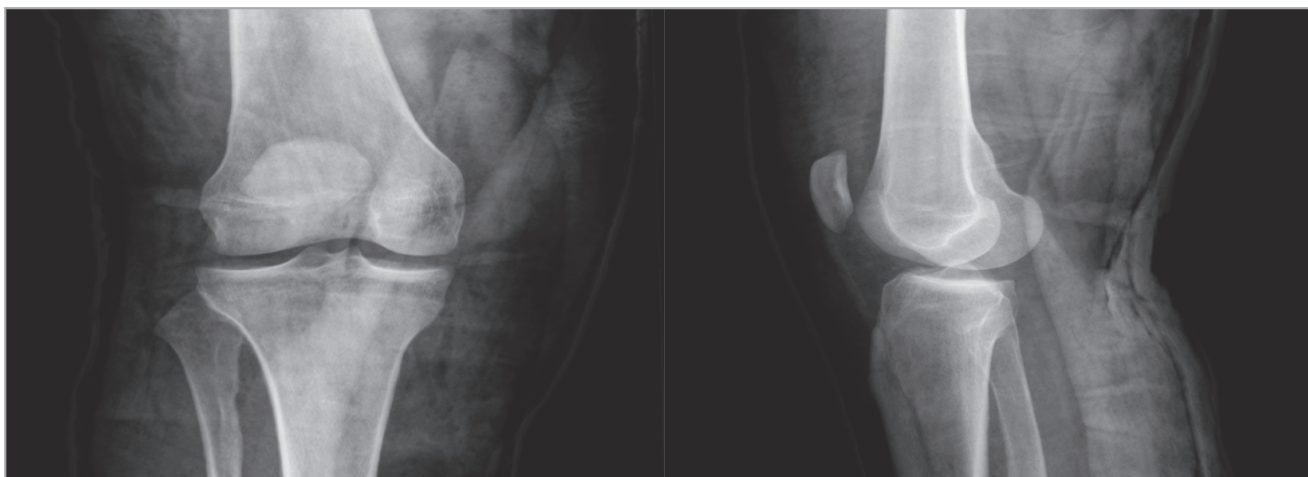
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**Figure 2** - X-Ray AP and Lat view of right knee after reduction of posterior dislocation.

Acute knee dislocation is a rare orthopedic diagnosis, with an overall incidence of 0.02%-0.2% among all musculoskeletal injuries and 0.5% among all joint dislocations.<sup>1</sup> Obese patients, due to the exponential increase of physiological knee stress, have a higher incidence of knee dislocation associated with ultra-low velocity trauma.<sup>1,2</sup> Radiographs confirm the diagnosis and guide the classification of the dislocation. Angiography or computer tomography angiography are recommended if

vascular damage is suspected.<sup>3</sup> Additional computed tomography and magnetic resonance evaluation are useful to exclude bone fractures and soft tissue lesions, respectively.<sup>1,4</sup> Surgical treatment ensures the best outcome regarding motion, function and stability.<sup>4,5</sup> A focused rehabilitation program is required after surgery, usually with an overall good prognosis regarding return to activities of daily living and sport.<sup>4</sup>.

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## Referências / References

- Howells NR, Brunton LR, Robinson J, Porteus AJ, Eldridge JD, Murray JR. Acute knee dislocation. *Injury*. 2011;42:1198-204. doi: 10.1016/j.injury.2010.11.018.
- Shelbourne KD, Pritchard J, Rettig AC, McCarroll JR, Vanmeter CD. Low velocity knee dislocations with intact PCL. *Orthop Rev*. 1992 ;21:607-8, 610-1.
- Henrichs A. A review of knee dislocations. *J Athl Train*. 2004;39:365-9.
- Peskun CJ, Levy BA, Fanelli GC, Stannard JP, Stuart MJ, MacDonald PB, et al. Diagnosis and management of knee dislocations. *Phys Sportsmed*. 2010;38:101-11. doi: 10.3810/psm.2010.12.1832.
- Levy BA, Dajani KA, Whelan DB, Stannard JP, Fanelli GC, Stuart MJ, et al. Decision making in the multi-ligament injured knee: An evidence based systematic review. *Arthroscopy*. 2009;25:430-8. doi: 10.1016/j.arthro.2009.01.008.