

A challenging skin lesion

A 6-year-old boy from a south-east Pacific country presented to a local hospital in that country with a painless skin lesion (*Figure 1*). He had a history of contact with another child with a similar lesion. Yaws was clinically diagnosed as one or more of the following signs were present:

1. Painless ulcer with scab
2. Papillomas
3. Palmar or plantar hyperkeratosis.

Yaws is caused by *Treponema pertenuis*, and is a chronic infection affecting the skin, bones

and cartilage. It is a non-venereal infection, transmitted through direct skin contact, which primarily affects boys <15 years old after 2–4 weeks of contact (World Health Organization, 2017). Although uncommon in the UK, clinicians should consider this

Figure 1. Yaws early skin lesion.



diagnosis in children from families arriving in the UK from Pacific or other areas endemic for yaws.

Microscopic (darkfield) examination confirms diagnosis and a single dose of intramuscular benzathine-penicillin is curative. On an island in Papua New Guinea, mass treatment with single dose oral azithromycin decreased the prevalence of active and latent infection (Mitjà et al, 2015). Although rarely fatal, if untreated it can lead to chronic disfigurement and disability (as a result of bone lesions) in 10% of cases within 5 years (World Health Organization, 2017). **BJHM**

Mitjà O, Houine W, Moses P et al (2015) Mass treatment with single-dose azithromycin for yaws. *N Engl J Med.* **372**(8): 703–710. <https://doi.org/10.1056/NEJMoa1408586>
World Health Organization (2017) Yaws: A forgotten disease. www.who.int/neglected_diseases/diseases/yaws/en/ (accessed 15 November 2017)

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Bisphosphonate-related proximal femoral insufficiency fractures

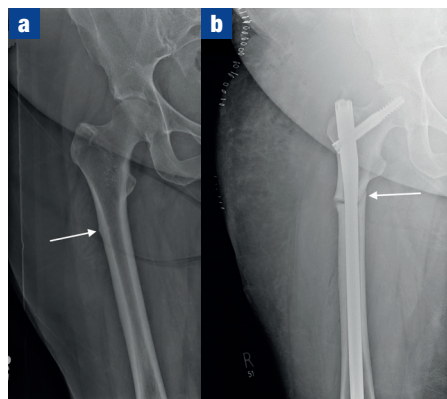
A 64-year-old woman who had been taking bisphosphonates for 7 years presented with pelvic pain which had lasted for several weeks. Radiographs of the right femur showed features suggestive of bisphosphonate-related fracture (*Figure 1*).

Treatment with bisphosphonates for more than 5 years is associated with an increased risk of subtrochanteric or femoral shaft fractures (Park-Wyllie et al, 2011). The mechanism is complex and includes effects on

collagen cross-links, bone density distribution and remodelling (Haworth and Webb, 2012).

The American Society for Bone and Mineral Research task force (Shane et al,

Figure 1. a. Thickening of the lateral cortex at the site of the fracture with no obvious fracture line (arrow), representing periosteal stress reaction. b. Complete, transverse fracture distal to lesser trochanter, involving both cortices (arrow) fixed by the application of an intramedullary nail. Note the characteristic medial unicortical 'beak'.



2010) produced criteria for diagnosing atypical femoral fractures. Characteristically, these fractures happen following minimal or no trauma, are transverse (or <30° oblique) and distal to the lesser trochanter. They are associated with a medial unicortical 'beak' when complete and localized periosteal reaction of the lateral cortex. The absolute risk of these fractures is low, and certainly lower than osteoporotic fractures. Therefore, clinicians should be selective in treating high-risk patients where the benefits outweigh risks. **BJHM**

Haworth AE, Webb J (2012) Skeletal complications of bisphosphonate use: what the radiologist should know. *Br J Radiol* **85**(1018): 1333–1342. <https://doi.org/10.1259/bjr/99102700>

Park-Wyllie LY, Mamdani MM, Juurlink DN et al (2011) Bisphosphonate use and the risk of subtrochanteric or femoral shaft fractures in older women. *JAMA* **305**(8): 783–789. <https://doi.org/10.1001/jama.2011.190>

Shane E, Burr D, Ebeling PR et al (2010) Atypical subtrochanteric and diaphyseal femoral fractures: Report of a task force of the American Society for Bone and Mineral Research. *J Bone Miner Res* **25**(11): 2267–2294. <https://doi.org/10.1002/jbmr.253>

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