

[ PICTURES IN CLINICAL MEDICINE ]

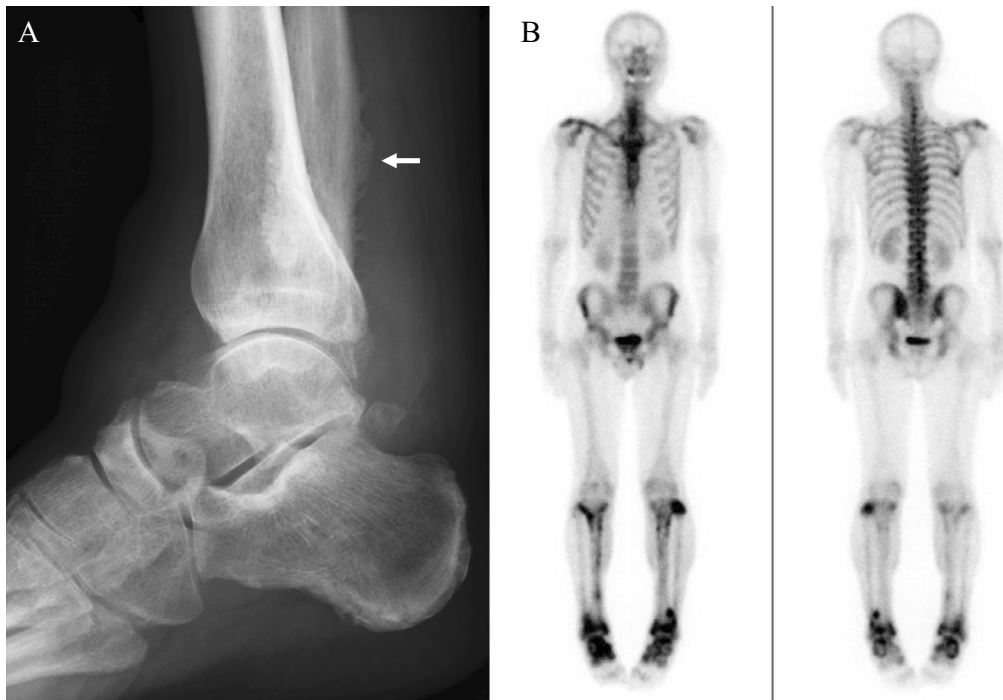
## Cotton Wool Sign in Paget Disease of Bone

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**Key words:** bone, cotton wool sign, Paget disease of the bone

(Intern Med 58: 1809-1810, 2019)

(DOI: 10.2169/internalmedicine.2120-18)



**Picture.**

A 48-year-old Japanese man with no remarkable medical history presented with pain and edema of both legs. Leg X-ray showed osteolysis and osteosclerosis, so-called cotton wool sign (Picture A). A technetium bone scan showed a marked uptake in the sternum, spine, sacroiliac bone, lower leg bone, and ankle joints (Picture B). His alkaline phosphatase level was 238 U/L. He was diagnosed with Paget disease of the bone (PDB), and administration of bisphosphonates was started, leading to remission. PDB is a bone metabolic disorder causing pain, fractures, and deformity. The prevalence of clinically diagnosed PDB is 0.3% in Caucasians over 55 years of age (1), but in Asian populations, the incidence is even rarer, especially in Japan, at 2.8 per

million (2). Given that PDB can be easily overlooked, it is important to consider the possibility of PDB for the accurate diagnosis and treatment of patients showing cotton wool sign, a characteristic finding of PDB.

**The authors state that they have no Conflict of Interest (COI).**

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Received: September 11, 2018; Accepted: December 11, 2018; Advance Publication by J-STAGE: February 25, 2019

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*Intern Med 58: 1809-1810, 2019*