

[PICTURES IN CLINICAL MEDICINE]

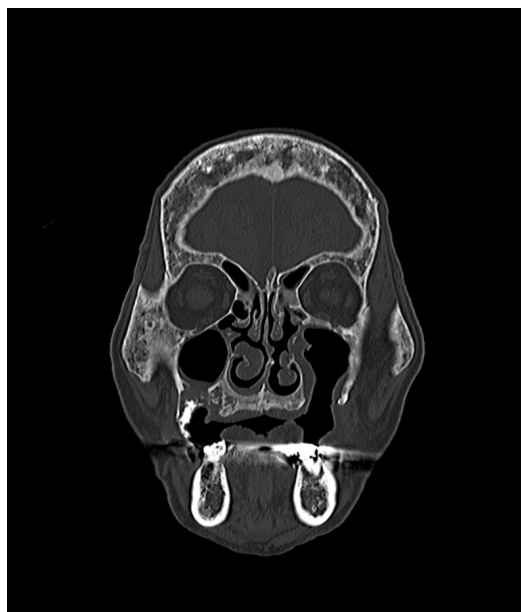
Paget's Disease of the Skull

Yoshiyuki Nakatsuji¹, Midori Miyashita², Masumi Kadoya³ and Yukio Nakatsuchi⁴

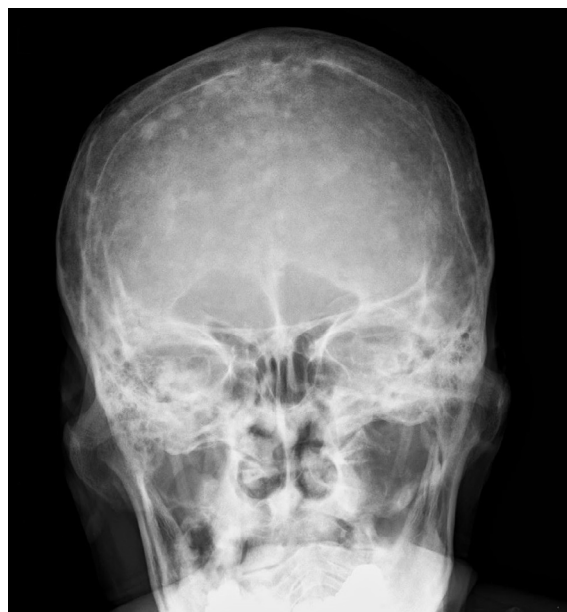
Key words: skull, cotton wool appearance, SPECT-CT, occipital condyle, Paget's disease of bone

(Intern Med 61: 1307-1308, 2022)

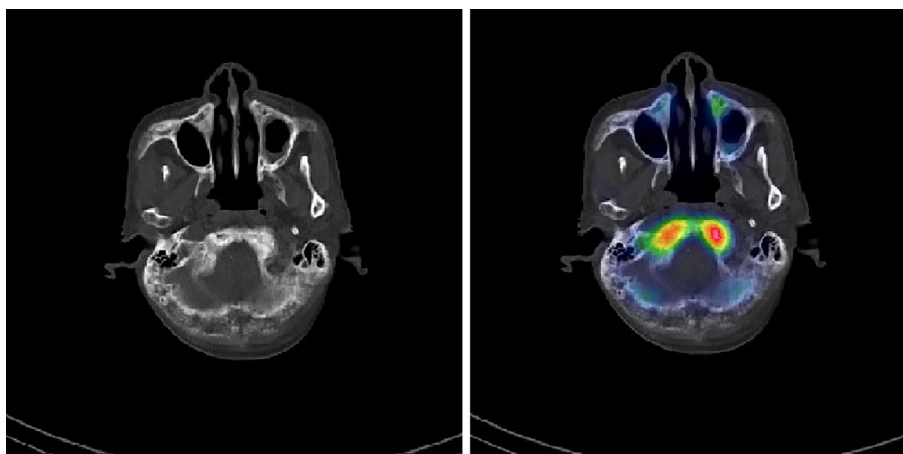
(DOI: 10.2169/internalmedicine.7696-21)



Picture 1.

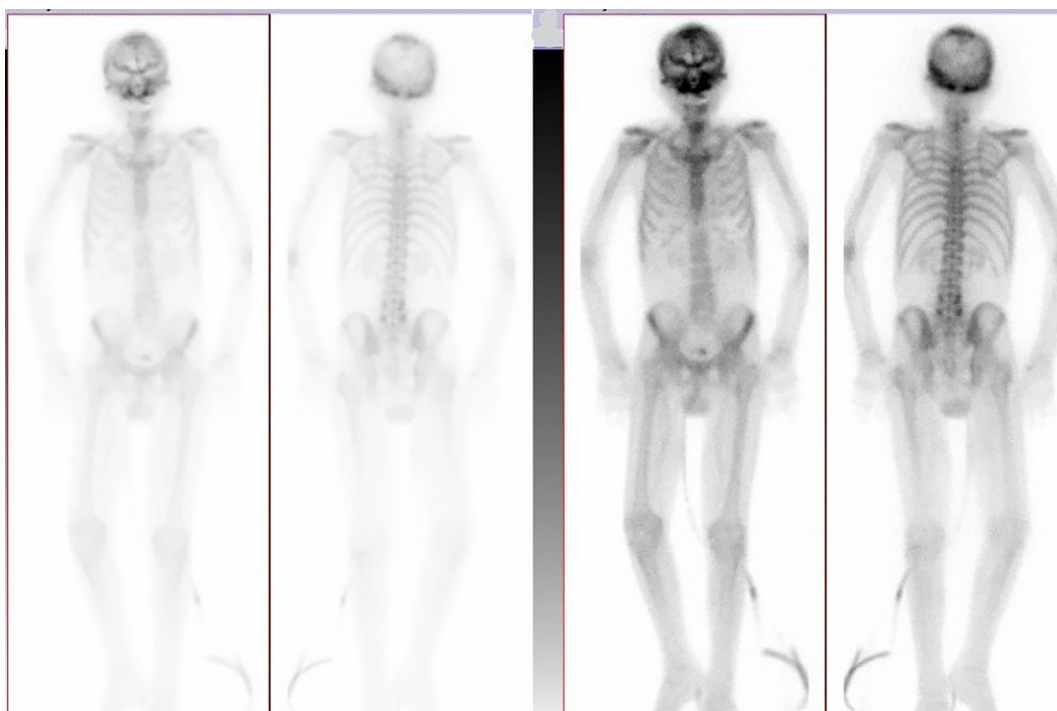


Picture 2.



Picture 3.

¹Department of Gastroenterology and Internal Medicine, Marunouchi Hospital, Japan, ²Department of Dental Surgery, Marunouchi Hospital, Japan, ³Department of Radiology, Marunouchi Hospital, Japan and ⁴Department of Orthopedics, Marunouchi Hospital, Japan
Received: April 5, 2021; Accepted: August 11, 2021; Advance Publication by J-STAGE: October 5, 2021
Correspondence to Dr. Yoshiyuki Nakatsuji, nakatsuji_y@marunouchi.or.jp



Picture 4.

A 96-year-old man was admitted to our hospital because of urosepsis with shock. A physical examination revealed a body temperature of 37.8 °C, blood pressure of 74/41 mmHg, hearing loss of the left ear, maxillary teeth defects and right costovertebral angle tenderness. The corrected calcium level was 9.4 mg/dL, and alkaline phosphatase was 380 IU/L (normal, 115-330). Bone formation markers were mildly elevated, and bone resorption markers were normal. Head computed tomography (CT) revealed a mixture of osteolytic and osteoblastic lesions (Picture 1). Skull X-ray showed no punched-out lesions but the characteristic ‘cotton wool’ appearance (Picture 2). Single-photon-emission CT (SPECT)-CT (Picture 3) of bone scintigraphy (Picture 4) showed that there was a strong radio isotope uptake in the occipital condyle. He was diagnosed with Paget’s disease of bone, which is a very rare metabolic bone disease, showing an incidence of about 2.8 per million in Japan (1, 2). The administration of vitamin D and calcium preparations was started without bisphosphonate.

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

Acknowledgements

We thank Mr. Hiroshi Hirano for his assistance in capturing the X-ray images and Ms. Taduko Yamagishi, Ms. Mie Kurata and Ms. Nao Furukawa for their assistance in preparing the manuscript.

References

1. Hashimoto J, Ohno I, Nakatsuka K, et al. Prevalence and clinical features of Paget’s disease of bone in Japan. *J Bone Miner Metab* **24**: 186-190, 2006.
2. Ralston SH, Corral-Gudino L, Cooper C, et al. Diagnosis and management of Paget’s disease of bone in adults: a clinical guideline. *J Bone Miner Res* **34**: 579-604, 2019.

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).