

## Solitary clavicle metastasis in prostate carcinoma

**To the Editor:** Metastatic prostate carcinoma (PC) may not only present without increased serum levels of prostate specific antigen, as we have reported in a letter published in the present issue of HJNM, but it may also present as a solitary clavicle metastasis. Such a case we describe in this letter as follows: A 67 year old retired married male worker, with diagnosed PC had undergone 3-dimensional conformal radiotherapy 3 years ago. He also received subcutaneously 10.8 mg of depot goserelin acetate every 3 months. The prostate specific antigen (PSA) serum level was 0.003 ng/ml (normal: <4 ng/ml). He was referred to our department for bone scintigraphy because of sternal pain. He had no previous trauma or traffic accident. Whole body bone scintigraphy was obtained after the intravenous injection of 740 MBq of technetium-99m methylene diphosphate ( $^{99m}\text{Tc}$ -MDP) using a dual-head gamma camera interfaced with a dedicated computer (Siemens E.CAM, Siemens Medical Systems, Inc. Hoffman Estates, IL 60195, USA).

Anterior scan image revealed markedly increased uptake in the left clavicle (Fig. 1). In the posterior scintigraphic image, slightly increased uptake was seen in the thoracolumbar vertebrae. Multidetector computed tomography showed a lytic and sclerotic region in the left clavicle compatible with metastasis (Fig. 2). A biopsy from this lesion showed PC (Fig. 3). Magnetic resonance imaging revealed degenerative changes in this area.

Metastases of PC in the skeleton are usually multiple. Review of the literature reveals that solitary metastasis from prostate carcinoma is rare. Only a few cases have been reported previously but there is no report of the clavicle being the site of a PC solitary metastasis [1-6].

### Acknowledgment

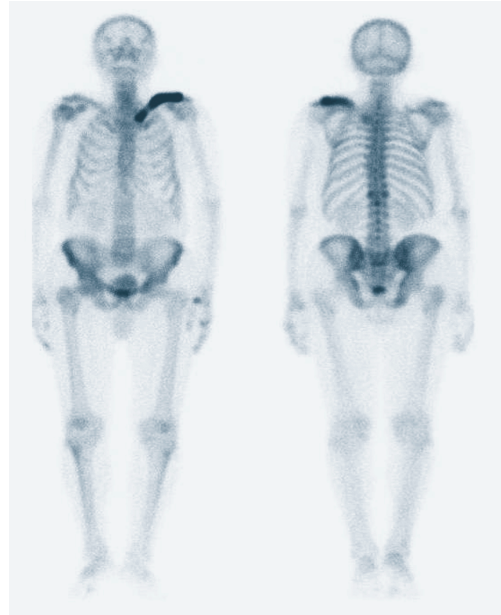
We would like to thank M.D. Umran Yildirim for the histopathology examination.

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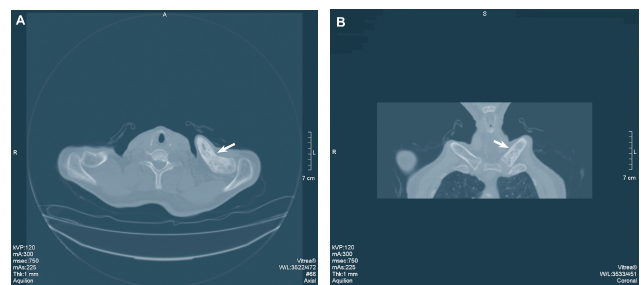
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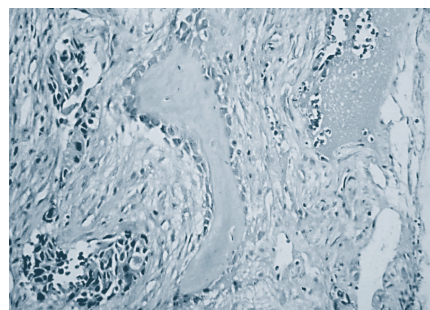
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**Figure 1.** Anterior and posterior whole body bone scintigraphy revealed atypical intense uptake in the left clavicle.



**Figure 2.** (A) Axial and (B) coronal multidetector computed tomography images show lytic and sclerotic regions in the expanded left clavicle compatible with metastasis (white arrows).



**Figure 3.** Metastatic prostate carcinoma nests near the exhibiting osteoblastic activity, surround bone fragment (hematoxylin-eosin x10).

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