Macro-CK and CK-BB Contributing to Sham CK-MB Elevation

Yuki Wada, Jun Tanigawa and Nobukazu Ishizaka

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Picture 1.

Picture 2.

A 65-year-old man in whom an inferior vena cava filter had been implanted for deep vein thrombosis was admitted to the cardiology department due to appetite loss and lumbar pain. Laboratory data showed increased total creatinine

kinase (CK, 796 U/L, Picture 1, left) and CK-MB (1,213 U/L), which exceeded the total CK value. Electrophoresis showed, in addition to an increase in CK-BB, a peak that migrated further toward the cathode than CK-MM, sugges-

tive of macro-CK (Picture 1, right). Given the findings on magnetic resonance imaging, prostate cancer with spinal metastasis was suspected (arrows, Picture 2), which was confirmed by a histopathologic examination of the prostate. Macro-CK type 2, which is reported to be present in 0.5-3.7% of subjects, may be under-recognized (1). Considering that patients with elevated total CK and CK-MB are frequently referred to the cardiology department, cardiologists should not overlook this abnormal condition, as macro-CK and elevated CK-BB may be associated with malignancy (2).

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

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