

Bisphosphonate-induced osteonecrosis of the jaw in patients with bone metastatic, hormone-sensitive prostate cancer. Risk factors and prevention strategies

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ABSTRACT

Aims and background. Evidence from the literature suggests that osteonecrosis of the jaw is emerging as a serious complication of treatment with bisphosphonates for patients with advanced prostate cancer.

Methods and study design. This study is a series of 60 patients with osseous metastases from prostate cancer under complete androgen deprivation therapy. All patients also received bisphosphonates intravenously every 3 to 4 weeks. Over a period of 3 and a half years, we recorded the incidence, presenting signs and symptoms of osteonecrosis of the jaw among those patients and the diagnostic workup required.

Results. Nine of the 60 patients with metastatic prostate cancer were found to be affected with osteonecrosis of the jaw secondary to bisphosphonate administration at the Urology Department at the University Hospital of Alexandroupolis between January 2006 and August 2009. For diagnostic reasons, all 9 patients underwent computed tomography scan and magnetic resonance imaging of the maxillary region, as well as a three-phase whole body bone scan.

Conclusions. There is evidence that administration of bisphosphonates in patients with advanced prostate cancer may increase the risk of osteonecrosis of the jaw. Guidelines regarding the diagnosis and management of those patients are needed.

Key words: bisphosphonates, osteonecrosis of the jaw, prostate cancer.

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