

# 3<sup>rd</sup> International Conference on **Nephrology & Therapeutics** June 26-27, 2014 Valencia Conference Centre, Valencia, Spain

## Severe hypocalcemia due to Denosumab use in a patient with metastatic prostate cancer

Usman Bhutta, Mohammed Muqeet Adnan, Tanzeel Iqbal and Lukas Hargsim  
University of Oklahoma Health Sciences Center, USA

Denosumab is a monoclonal antibody used for prevention of skeletal-related events (SRE's) in patients with bone metastases from solid tumors. Hypocalcemia is a rare and dangerous side effect of the drug denosumab. Here, a case of a patient with metastatic prostate cancer who developed severe hypocalcemia after the administration of the drug is presented. The patient's vitamin D levels were low when checked after administration of the drug, which likely predisposed him to the development of hypocalcemia. He was placed on high doses of oral and intravenous (IV) calcium and vitamin D without any appreciable response in the serum calcium level. His ionized calcium remained below 0.71 mmol/L despite supplementation with oral and IV calcium. During the hospital course, he developed hydronephrosis from the spread of his tumor, did not want to undergo percutaneous nephrostomy tube placement; therefore, it was decided to dialyze him for acute renal failure and to correct his hypocalcemia. Checking calcium and vitamin D levels prior to the administration of denosumab is vital in preventing hypocalcemia. If hypocalcemia is severe and not responsive to high doses of vitamin D, oral and IV calcium, then hemodialysis with a high calcium bath can correct this electrolyte abnormality.

Usman-Bhutta@ouhsc.edu