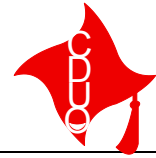


# XXI CONGRESSO NAZIONALE

Odontoiatria Traslazionale

(Roma, 10-12 Aprile 2014)



Collegio dei Docenti Universitari  
di discipline Odontostomatologiche

## PATOLOGIA ORALE

INDICE >>>

### RESTITUTIO AD INTEGRUM IN A CASE OF ONJ RELATED TO BEVACIZUMAB

F. Giancola<sup>1</sup>, O. Di Fede<sup>1</sup>, A. De Lillo<sup>2</sup>, G. Troiano<sup>2</sup>, L. Lo Russo<sup>2</sup>, G. Campisi<sup>1</sup>

<sup>1</sup>Department of Surgical, Oncological and Oral Sciences, University of Palermo, Palermo, Italy

<sup>2</sup>Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy

**Aim.** Bevacizumab is a humanized recombinant monoclonal antibody that blocks vascular endothelial growth factor (VEGF). The activity of VEGF is the ability to promote the vascular endothelial cells proliferation inducing the formation of new blood vessels. Bevacizumab is used in the treatment of selected advanced colon, lung, renal and central nervous system tumours and plays a developing role in the management of breast and ovarian cancers. It is also injected intraocularly for treatment of macular degeneration. Recently, bevacizumab has been reported as responsible of drug-related osteonecrosis of the jaw (ONJ), showing a histological pattern similar to bisphosphonate-related ONJ. Moreover, it may increase the risk for osteonecrosis of the jaw when administered in isolation or when given concurrently with bisphosphonates.

**Materials and methods.** Only few case reports in literature have been reported describing ONJ after bevacizumab administration. In June 2011, a 57-year-old female patient was referred to our department for pain in the left posterior mandibular region. She reported the following anamnestic data: in 2002, for the diagnosis of breast cancer, she underwent to left quadrantectomy and radiant treatment; from October 2010, she was receiving multimodal chemotherapy containing bevacizumab. No previous treatment with bisphosphonates, or other known local and systemic risk factors were reported. Intraoral examination showed a painful area of bone exposure in the left posterior lingual mandible. The surrounding soft tissue was erythematous with purulent discharge and with swelling of the extraoral soft tissue of the left mandible. After interaction with her oncologist, bevacizumab has been suspended and systemic antibiotic (ampicillina/sulbactam intramuscularly twice daily for 8 days and metronidazole 250 mg per os twice daily for 8 days), local antiseptics (chlorhexidine 0.2% mouth rinses and 0.5% chlorhexidine gel) were administered.

**Results.** After 15 days, she showed a complete healing after spontaneous sequestration of a necrotic bone fragment.

**Conclusions.** The antiangiogenic and antiresorptive effects of bevacizumab are dose-dependent and time-dependent. Probably this implies that angiogenesis, bone remodelling and healing processes should restart after drug cessation. The present case supports the necessity to apply BRONJ prevention protocol also in patients in therapy with bevacizumab.