

Brazilian Oral Research

Print version ISSN 1806-8324

Abstract

[GURGEL, Bruno César de Vasconcelos](#) et al. Selective COX-2 inhibitor reduces bone healing in bone defects. *Braz. oral res.* [online]. 2005, vol.19, n.4, pp. 312-316. ISSN 1806-8324. doi: 10.1590/S1806-83242005000400014.

Anti-inflammatory agents have been reported to regulate bone healing. The aim of this study was to investigate the effect of a selective cyclooxygenase-2 inhibitor (meloxicam) on bone healing in calvarial defects in rats. Thirty-six adult male Wistar rats were included. After anesthesia, a linear incision was made through the skin of the scalp, a full-thickness flap was reflected and a 4 mm round defect was made with a trephine drill. The animals were randomly assigned to one of the following 4 treatment groups (9 animals each), including daily subcutaneous injections: A: saline solution for 15 days; B: saline solution for 45 days; C: 3 mg/kg of meloxicam for 15 days and D: 3 mg/kg of meloxicam for 45 days. The animals were sacrificed and the specimens, routinely processed. The bone filling was histometrically measured and statistical analysis, performed. Intergroup comparisons demonstrated that the meloxicam groups presented a significant reduction in bone healing when compared to their respective controls (group A, 44.5 ± 5.75%, against group C, 57.5 ± 7.25%, $p < 0.05$; group B, 40.25 ± 13.75%, against group D, 52.25 ± 17.25%). Within the limits of the present study, it can be concluded that selective cyclooxygenase-2 inhibitors may reduce bone healing in calvarial defects in rats after continuous administration.

Keywords : Anti-inflammatory agents, non-steroidal; Cyclooxygenase inhibitors; Wound healing; Rats.

[?abstract in portuguese](#) [?text in english](#) [?pdf in english](#)

services

-  custom services
-  Article in pdf format
-  Article in xml format
-  Article references
-  How to cite this article
-  Access statistics
-  Cited by SciELO
-  Similar in SciELO
-  Automatic translation
-  Show semantic highlights
-  Send this article by e-mail



All the content of the journal, except where otherwise noted, is licensed under a [Creative Commons License](#)

Sociedade Brasileira de Pesquisa Odontológica

Av. Lineu Prestes, 2227
Caixa Postal 8216
05508-900 São Paulo SP - Brazil
Tel./Fax: +55 11 3091-7810



bor@sbpgo.org.br