

Stem cells and androgen receptor in human periapical periodontitis Células Madre y Receptor de Andrógenos en Periodontitis Periapical Humana

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Activation of macrophages in periapical granulomas occurs through the presence of cytokines, endotoxin and other genetic and epigenetic factors, allowing the initiation of inflammation and bone resorption. The present study aims to analyze the presence of CD133 protein (marker of stem cells) and the AR (androgen receptor) protein in biopsies of human odontogenic periapical granuloma. Biopsies from 14 adult male patients with diagnosis of periapical granuloma included in paraffin blocks were processed histologically to obtain 5- μ m thick sections. Protein presence was detected and analyzed by immunohistochemistry of CD133 and AR. The quantification considered the number of positive cells in 0.17 mm² random areas under the microscope using a 1000X objective. Both CD133 and AR proteins are expressed abundantly in cells in pathological periapical granulomas tissue. The number of cells expressing CD133 and AR shows a wide variation

coefficient, so its variation is a particular feature for ea