



PhD in Health sciences

Research Area: Oral and health pathology: local and systemic implications

Title: Influence of the NiTi arches superficial patterns on corrosion: a study of different composition arch-bracket galvanic couples in saliva, fluor and carbonated drinks.

An alloy allergenic potential is directly related with its corrosion. In all the metals used in orthodontic treatment, nickel alloy are the ones with more allergenic reactions. In these study, it was created a galvanic couple between brackets with different compositions and NiTi wires arranged according with their surface pattern. Their corrosive behavior will be evaluated when placed in artificial saliva, fluor and carbonated drinks. Also the changes in arches surfaces will be measure with SEM microscopy.

Keywords: Corrosion, NiTi, orthodontic, galvanic couple, fluor, carbonated drinks, superficial pattern

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