HISTOLOGICAL AND RADIODENSITOMETRIC EVALUATION OF THE EFFECT OF OZONATED OIL AROUND INTEGRATED DENTAL IMPLANTS UNDER THE INFLUENCE OF IMMUNOSUPPRESSIVE DRUG

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Abstract

Immunosuppressive agents have been recognized as a factor that induces changes on bone metabolism. The purpose of this study was to evaluate the effect of ozonated oil under the influence of Cyclosporine A (CsA) on osseointegration. Materials and methods: 20 implants were placed in 20 rabbits assigned to Group A & B. CsA was injected in an immunosuppressive dose in both groups. At the day of surgery, Group A received topical ozonated oil around dental implants, Group B control group. Animals were sacrificed after 2-month. Radiographs were obtained at implant surgery and at the day of sacrifice. Bone quality was compared between groups radiographically. To qualify osseointegration the tibiae were microscopically evaluated using scanning electron microscope and light microscope. Results: In ozonated specimens light microscopic examination demonstrated evidence of more organized type of mature bone. Conclusion: Within the limits of this study, the results suggest that short-term administration of CsA, associated with topical ozonated oil, may influence bone density and quality of osseointegration around dental implants.

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