

PhD in Biomedical Sciences

Research Area: Dentistry/Implantology

Title: Osseodensification: a paradigm shift in implant site preparation

Osseodensification is an innovative surgical technique for implant site preparation that avoids bone sacrifice, contrary to the conventional drilling protocols. This is possible because of special burs designed to rotate in counter-clockwise direction. It is a nonextraction technique that creates a layer of compacted bone along the surface of the osteotomy, while simultaneously plastically expanding the bony ridge, which can bring many advantages in clinical practice. Osseodensification can be used in different clinical situations, such as ridge expansion or maxillary sinus elevation by crestal approach in a simple, safe and predictable way with reduced morbidity. Furthermore, it may enhance implant primary stability and help to achieve higher insertion torque values specially in low density bone.

Keywords: Osseodensification, osteotomy, bone, density

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Start Year: 2019