Analysis of the resonance frequency and torque of four implant’s company

**Purpose**: This randomized clinical trial aimed to investigate the relationships between insertion torque, Implant Stability Quotient (ISQ), bone quality and Crestal Bone Loss (CBL) of implants placed in the short and long time.

**Materials & Methods**: We selected all those who had edentulous in the posterior region of the mouth in both jaws. Regenerative techniques, expansive bony ridge or maxillary sinus were used in no one's case. Total of 80 implants were inserted, all submerged and all had a diameter greater than 3.3 mm and a length of at least 10 mm, rough surface and is expected to conventional healing period. Periodic reminders of 2, 4 months prior to shipment, and 1 month after prosthetic loading, considering the RFA were carried out.

**Results**: The data in our possession are: One failed implant, placed in zone 27, had a torque value of 24 N/cm² and a value of 60 ISQ, Straumann: 79±2.80 Mean±Dev. St; Neoss: 75.5±7.55 Mean±Dev. St; Ghimas: 73±8.48 Mean±Dev. St; IntraLock: 72.17±7.07 Mean±Dev. St. The data we have do not allow relating the torque of entry with the ISQ value. The only statistically significant data with P<0.05% unique to the ISQ values were of Straumann.

**Conclusion**: From our data we found no relationship between insertion torque and ISQ in posterior edentulous saddles. It seems, however, that the ISQ is related to the plant geometry, in particular the length and bone morphology, as implants inserted in the “soft” bone show a progressive increase of the values in the course of the healing period.

**Biography**

Giovanni Giorgetti finished his studies in Medicine by attending the Second University of Naples, then he specialized in Oral and Maxillofacial Surgery. He is the Director of the Maxillofacial Surgery Department at the Salus Clinic in Battipaglia, Italy and he deals with rehabilitations maxillofacial oncology. He uses new technologies in clinical practice. He has published more than 25 works in renowned magazines and is collaborating with international renowned companies.

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