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Ten-year Life Table Analysis on TPS Coated Implants Inserted in the Posterior Maxilla

Problem: Dental implant therapy has been accepted as a modality with a high level of predictability. Traditionally, the terior region of the oral cavity has been associated with higher failure rates because implantation in type IV bone quali frequently encountered. In addition, the presence of the sinus limits often requires the use of short implants. The aim of study is to report on our 10-year experience with ITI implants inserted in the posterior maxilla. We specially investigate relationship between failure occurrence, bone density and implant length.

Material and Methods: Between April 1989 and April 1999, 541 implants have been consecutively inserted into the p rior maxilla of 277 patients (57.4 percent females, 42.6 percent males) aged between 18 and 81 years (average 52.3±12.7) implants passed the healing period of at least three months, they were either solid screws of Ø 4.1 and 3.3 mm (53.3 perc hollow-screws (33.5 percent) or hollow-cylinders (13.1 percent). 4.2 percent were implants of 6 mm length, 23.8 perce 8 mm, 31.4 percent of 10 mm and 40.6 percent of 12 mm. 198 implants (36.6 percent) were inserted in type IV bone. S perforation was recorded for 27.4 percent of implants, whereas sinus lifts were performed on only 3.1 percent of t Descriptive data and life table analysis were used for this evaluation.

Results and Conclusions: During the observation period, 37i/17p (6.7%/6/1 percent) dropped out. Four early failures percent) and five late failures (0.9 percent) were recorded: 15 implants (2.7 percent) were treated for peri-implantitis. All early failures were type IV bone implants, where no type IV bone implant filled after loading. Late failures occurred afte 83 months of function, and were one 10 mm and four 8 mm implants. Life table analysis based on 541 inserted imp showed an overall 95.0 percent cumulative success rate. The one-year success rate based on 447 implants was 99.2 per the three-year success rate based on 300 implants was 98.3 percent and the five-year success rate based on 160 implants 95.0 percent. The failure occurrence was compared between posterior maxilla (Max) placement (541i/277p) and overall implant placement (2181i/882p). It was found that implants inserted in the posterior maxilla did not exhibit a higher fa rate (early failures, Max vs. All: 0.4 percent vs. .6 percent; late failures, Max vs. All: 0.9 percent vs. 1.05 percent). It is ulated that it is the rough TPS surface that contributed to the high predictability of these implants placed in the posterior illa, where short implants or/and low density bone are often encountered.

References

1. Bahat O. Treatment planning and placement of implants in the posterior maxilla: Report of 732 consecutive Nobelph implants. Int J Oraql Maxillofac Implants, 1993; 8:151-161
2. Bernard JP, Belser UC, Szmukler-Moncler S, Martinet JP, Attieh A. A 3-year success rate of short ITI implants i posterior jaw. Med Buc Chir Buc, 1995; 1:11-18

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