ABSTRACT

Background: The aims of this study were to evaluate the long-term survival rates of short (7 mm to 8.5 mm) and extra-short BTI implants (5.5 mm and 6.5 mm) installed both in the maxilla and the mandible.

Methods: Two different retrospective cohort studies are reported. In the short BTI implant study, 340 implants installed in 201 consecutive patients were evaluated whereas in the extra-short BTI implant study, 48 implants placed 35 were considered. All implant installations were performed by two experienced surgeons and rehabilitations were done by 3 prosthodontists. Each implant failure was carefully analysed. Implant survival was analysed using a life-table analysis (Wilcoxon [Gehan] test).

Results: The overall survival rates of short implants were 100% both for the implant and subject-based analysis respectively. The mean follow-up period for short implants was 80.5 ± 8.9 months. In the extra-short BTI implant study, survival rates were 97.9% and 97.1% for the implant and subject-based analysis respectively. In this second study, follow-up period was 23.4 ± 6.4 months. Distal and mesial bone loss of extra-short implants at 24 months post-insertion ranged between 1.30 mm and 1.39 mm respectively.

Conclusions: Results of the present retrospective study show that treatment with short and extra-short BTI implants can be considered safe and predictable if used under strict clinical protocols.