22 OsseoSpeed Profile implants were inserted in 16 patients (8 males, 8 females, mean age 41 ± 19.9 years). All implants were placed immediately into extraction sockets of upper incisors. Facial bony defects (4 total, 8 partial losses of facial lamella) were reconstructed immediately with autogenous bone chips without raising a flap. All patients received immediate prosthetic restorations. Primary outcome variables were implant survival, marginal bone levels and Pink Esthetic Score.

Results

Mean primary stability at time of implant insertion was 23 Ncm; 3 further implants had to be excluded because of insufficient primary stability for immediate provisionalization (below 15 Ncm). Mean follow-up was 22 months (range 12 to 29 months). There was one implant loss. Cumulative survival rate according to Kaplan-Meier was 95.5%. Marginal bone height maintained at the level of the implant shoulder and averaged -0.2 ± 0.55 mm at the final follow-up. In 76% of the implant sites it was possible to keep the gingival esthetics stable or even to improve it from the pre-operative examination (mean 10.5, SD 2.3) to the final follow-up (mean 11.6, SD 1.3).

Conclusions

Results of survival rate, marginal bone stability and esthetic improvement suggest proof of principle for immediate provisionalization of OsseoSpeed Profile implants.