Prosthetic complications of implant supported fixed partial dentures in partially edentulous cases after an observation period of 5 to 10 years

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camlog

Purpose: The purpose of this study was to evaluate the incidence of the most common technical problems, in implant-supported fixed partial dentures (FPDs), and assess the survival and success rate (event-free survival) after 5-10 years of function.

Materials and Methods: Patients with missing teeth were treated with implants between 2001 and 2006. Follow-up examinations were scheduled 1week after suprastructure placement, after 6 months, as well as after 1-10 years. Complications with implant supported restorations were recorded. Success was defined as event-free survival. Survival and success probabilities were estimated with the Kaplan–Meier estimator.

Results: In 241 patients, a total of 766 implants were placed: 273Straumann, 212 Astra, 128 Camlog, 90 Swissplus, 63 Frialit and restored with 420 implant-supported FPDs (156 single crowns, 48 splinted crowns, 216 FPD bridges). The survival rate of FPDs supported by implants was 97.14% after mean follow-up of 7.4 years. The success rate (event-free survival) of the FPDs was 96.19%. The cumulative incidence of screw loosening was 0.52 %. Fracture of the veneering porcelain occurred in 3.81 % of all FPDs. There were 16 porcelain fractures of the implant-supported restorations examined. Of the total number of fractures recorded, 4 required repair and 12 replacement of the restoration. The overall complication incidence was highest in the group of three unit fixed partial dentures.

Conclusions: Fixed partial dentures supported by implants showed low technical complications rates, the most common being fracture of the veneering porcelain.

	Type	n
Implant	Straumann	273
	Camlog	128
	Astra	212
	Swissplus	90
Restoration	Single crown	156
	Splinted crown	48
	Fixed partial denture	216

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