

Tables

Rehabilitation of **edentulous patients** with screw-retained **CAD/CAM prostheses**

Author: Dr Nikolaos Papagiannoulis, Germany

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		Bone quantity		Soft-tissue support	Hygiene and patient handling
		Vertical bone defect	Horizontal bone defect		
Table 1: Fixed prostheses compared with removable prostheses.					
Fixed	Cemented	None or low	Low	Not necessary	Optimal
Screw-retained	Cast on multi-unit	Low or moderate	Moderate	Replacement of teeth is sufficient, moderate lip support is needed, low vestibule, Angle's Class II 1 and 2	Optimal or good, cleaning channels possible, aesthetically sufficient
	Milled on multi-unit				
	Milled on implant (scan bases or with internal geometry)				
Removable	Friction telescopes	High	High	Tooth replacement is not sufficient, anterior saddle is necessary, high vestibule, Angle's Class III	Moderate or slightly limited
	Galvanic secondary structure on telescopes				Moderate without limitation
	Bar	High	High		Good
	Locator or ball attachments	High	High		Limited

Table 2: Spread of manufacturing process, implant systems and implant placement.

						Implant type						Implant placement		
		Maxilla	Mandible	Implants lost in first 8 weeks	Implants lost during follow-up (up to 7 years)	Type B	Type Z	Type I	Type C	Various	Type M	Late	Immediate	Early
1–3	Cast	14	6	1	0	17	2	0	1	0	0	20	0	0
4–15	Milled multi-unit level	45	22	1	0	12	0	6	0	4	45	30	37	0
16–23	Milled implant level	35	9	1	0	36	0	7	0	3	0	13	24	9
	In total	94	37	3 (2%)	0 (0%)	65	2	13	1	7	45	63	61	9

Table 3: System overview.

Implant type	Straight/angled	1-/2-piece	Anti-rotation abutment to implant	Anti-rotation superstructure to abutment	Anti-rotation at holding screw of abutment	Abutment transfer needed	Special instruments needed	Abutment design
Type A	Straight	1-piece	Yes	Yes	–	No	Yes	–
	Angled	2-piece	Yes	No	–	Yes	No	–
Type B	Straight	Both	Yes	No	–	No	Yes	–
	Angled	2-piece	Yes	No	–	Yes	No	–
Type C	Straight	2-piece, snaps in	Yes	Yes	Yes	No	Yes	Privileged, concave
	Straight	1-piece	No	Yes	Yes	No	Yes	Privileged, concave
	Angled	2-piece, snaps in	Yes	Yes	–	No	–	–
Type D	Straight	1-piece	Yes	Yes	–	No	No	–
	Angled	2-piece	Yes	No	–	No	No	–
Type M	Straight	1-piece	Yes	Yes	–	No	Yes	Privileged, concave
	Angled	2-piece	Yes	No	–	Yes	Yes	Privileged, concave

Table 4: Evaluation of the manufacturing process.

	Jaws	Implants	Expense, time, appointments	Handling	Complications	Follow-up (4–6 months)	Comment
Cast	3	20	High	Angled abutment difficult	Often screw loosening	45 min	Time- and cost-intensive
Milled multi-unit level	12	67	Moderate	Angled abutment difficult	Rarely screw loosening	45 min	Caution at implant placement and re-entry
Milled implant level	8	44	Low	Easy	Rarely screw loosening	45 min	Often geometry for transversal stability insufficient; scan bases needed