

EFFECT OF TELESCOPIC PARTIAL DENTURES ON SINGLE REMAINING TOOTH SURVIVAL

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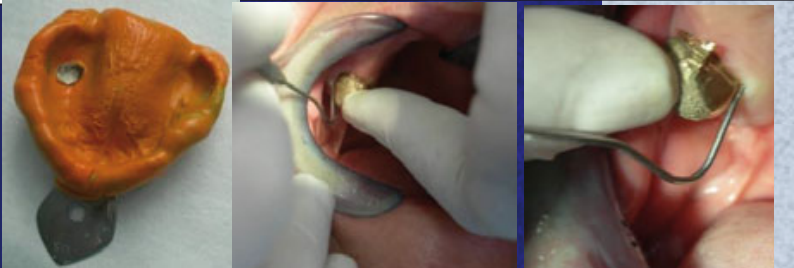
Figure 1: Telescopic denture



Figure 2. Dynamometer



Metal fundaments of an outer telescopic crown positioned on inner telescopic crown - situated on master cast
Subsequent checking of retaining and friction
Separated outer and inner crown, fabricated with the gold alloy



Telescope crowns (outer and inner) in elastomeric impression of an upper partially edentulous jaw
Positioned metal constructions of outer and inner telescopic crowns in the probing phase
Probing, positioned on oral-palatal side



Fixation complex of the metal part of the outer telescope crown with casted removable denture and separated inner crown
Two eccentrically located vital abutments in the lower jaw after the tooth preparation
Final impression of prepared teeth and partially edentulous lower jaw of a patient



Assessing the friction function of the inner surface of an outer telescope crown and corresponding outer surface of the inner crown
The cementing phase (using Zn-phosphate cement in this case)
The fabricated dentures in the mouth of a patient

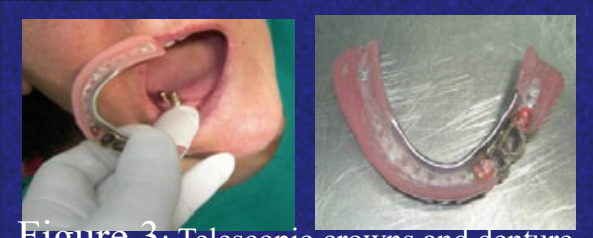


Figure 3: Telescopic crowns and denture

Introduction. Telescopic crowns and casted partial dentures can be used in many clinical cases regarding prosthetic therapy of partially edentulous patients (Fig. 1).

Purpose. This study examined the impact of telescopic partial dentures on single remaining tooth continuation in a period of 10 years.

Material and Methods. Two partially edentulous patients with single remaining teeth in their jaws - single premolars in a lower jaw, and single molar in the upper jaw on the right side - were selected for the fabrication of telescopic metal-framed partial dentures. Dentures were retained on residual dentition entirely by cylinder telescope crowns. Inner telescopic crowns and metal fundaments of outer telescopic crowns were fabricated using a precious alloy (gold) (*DAMCAST CC, Yadent Zhengzhou, China*). The fit of the secondary outer crown copings over the primary copings was evaluated on the master casts as well as in the patient's mouth. Outer crowns were mechanically retained (*Palavit G., Heraeus-Kulzer, Germany*) in specifically designed boxes in a metal framework of cobalt–chromium–molybdenum alloy (*Co-Cr-Mo-W, (Remanium 2000) UNS R30075, ASTM F75, ISO 5832-4*) of partial dentures. Indirect light-cure composite (*Sinfony™, 3M*) was used for the fabrication of aesthetic axial and occlusal portions of outer telescope crowns. Acrylic-resin anatomic cross-linked artificial teeth (*Optognath, Bayer-Galenika, Galenika, Serbia*) were used in the set-up procedure in a semi-adjustable articulator (*Artex CT, Amann Girrnbach*).

Results. Vital abutment teeth survived considerably long - for 10 years, in the situation of single and few tooth abutments, with at least one recall appointment after the 1st year of the therapy (Fig. 3).

Conclusion. Telescopic dentures provided aesthetically pleasing and comfortable effects, with prevention of bone loss and a longer life span of remaining premolar and molar teeth.

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