The ball welding bar: A new solution for the immediate loading and not of screw-retained, mandibular fixed full arch prostheses

Andrea Guida
Italian society of esthetic dentistry, Italy

Purpose: To present a new bar system technique, which can be used to manufacture screw-retained, mandibular fixed full-arch prostheses.

Methods: Over a 4-year period, all patients with complete mandibular edentulism or irreparably compromised mandibular dentition, who will restore the masticatory function with a fixed mandibular prosthesis, were considered for inclusion in this study. The “Ball Welding Bar” (BWB) technique is characterized by smooth prosthetic cylinders, interconnected by means of titanium bars which are adjustable in terms of distance from ball terminals and are inserted in the rotating rings of the cylinders. All the components are welded and self-posing.

Results: Forty-two patients (18 males; 24 females; mean age years) were enrolled and 210 fixtures were inserted to support 42 mandibular screw-retained, fixed full-arch prostheses. After two years of loading, 2 fixtures were lost, for an implant survival rate of 97.7%. Five implants suffered from peri-implant mucositis and 3 implants for peri-implantitis. Three of the prostheses (3/42) required repair for fracture (7.1%): the prosthetic success was 92.9%.

Conclusions: The BWB technique seems to represent a reliable technique for the fabrication of screw-retained mandibular fixed full-arch prostheses.

prof.guida@outlook.it