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Objective: Implant-supported hybrid prostheses are a satisfactory treatment option in cases with advanced bone loss, especially when increased interarch distance and soft tissue support are needed. This case report presents the rehabilitation process using a mandibular hybrid prosthesis following implant explantation due to peri-implantitis, and the fabrication of a maxillary complete denture.

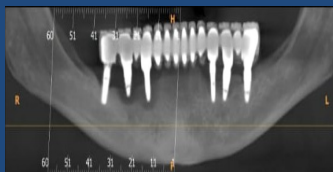


Figure 1: Pre-op radiograph showing peri-implant bone loss



Figure 2: Intraoral view of placed multi-unit abutments

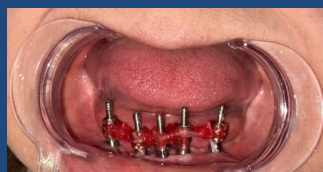


Figure 3: Splinted open-tray impression copings placed on multi-unit abutments

Case Report: A 55-year-old female patient referred to our faculty with complaints of pain and mobility in her mandibular implant-supported fixed prosthesis and recurrent fractures in her maxillary complete denture. Clinical and radiographic evaluations revealed severe bone loss and peri-implantitis around the mandibular implants. The implants were explanted, and five new implants (Dentis, Daegu, South Korea) were placed between the mental foramina in the same session. After a three-month osseointegration period, fabrication of a bar-supported hybrid prosthesis for the mandible and a new complete denture for the maxilla was planned. An open-tray impression technique was used for the mandible using splinted impression posts and a type-A silicone impression material (Aquasil Ultra, Dentsply Sirona, USA). Passive fit of the cobalt-chromium bar was confirmed through screw testing and radiographic evaluation. Esthetics, function, phonetics, mandibular movements, and soft tissue support were assessed during the intraoral try-in phase. At the delivery appointment, intraoral adjustments were made, and the hybrid prosthesis was secured with 20 N/cm torque per the manufacturer's recommendations. The prosthetic rehabilitation successfully met the patient's esthetic, functional, and phonetic expectations, resulting in high patient satisfaction.



Figure 4: Open-tray impression taken with type A silicone



Figure 5: Radiographic evaluation of passive fit of the bar

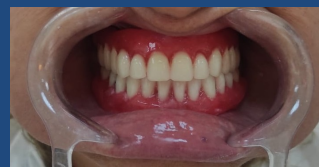


Figure 6: Intraoral trial of the tooth setup

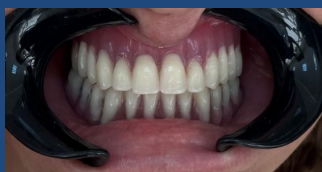


Figure 7: Intraoral view of the final prosthesis



Figure 8-a: Intraoral view of the final prosthesis



Figure 8-b: Intraoral view of the final prosthesis

Conclusion: This case demonstrates that hybrid prostheses are an effective prosthetic rehabilitation option in patients with severe bone loss. Hybrid prostheses can yield successful outcomes in function, esthetics, and patient satisfaction, particularly in patients with surgical limitations. At two-week follow-up, the patient reported resolution of her initial complaints and expressed satisfaction with the prosthesis.