milled from a polymethylmethacrylate resin to evaluate the esthetic parameters, teeth positions, and vertical dimension. After confirming clinical parameters, a titanium framework was fabricated. The passive fit of the framework was verified using the Sheffield (single-screw) test. The final prosthesis was completed using a zirconia superstructure.

Discussion: Accurate framework production is critical for the success of implant-supported prostheses and depends on reliable impressions. The photogrammetry system allows clinicians to obtain the exact position of dental implants and to fabricate accurate implant suprastructures. However, since photogrammetry does not capture soft tissue information, a second digital impression is required. When multiple implants are involved, photogrammetry offers a fast, accurate, and predictable solution within the digital workflow.

Keywords: photogrammetry, dental implants, dental impression technique, computer-aided design, computer-aided manufacturing

PP-160 Photogrammetry-Assisted Digital Workflow for Full-Arch Monolithic Zirconia Restorations: A Clinical Report

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INTRODUCTION: Achieving cross-arch accuracy and passive fit remains a major challenge in conventional impression techniques for full-arch implant restorations. In contrast, photogrammetry-assisted digital workflows offer enhanced precision, efficiency, and predictability. This clinical report describes the rehabilitation of a 56-year-old fully edentulous female patient using a fully digital protocol and monolithic zirconia prostheses for both jaws.

Case Description: Twelve endosseous implants (Ø3.7 mm, length 10–12 mm; ETK, France) were placed in anterior and posterior regions of the maxilla and mandible. After successful osseointegration, multi-unit abutments were connected. Final impressions were obtained using a hybrid protocol that combined photogrammetry (Imetric-Icam, Switzerland) with intraoral scanning (iTero Lumina, USA). With reference bars in place, interocclusal records and vertical dimension were registered using C-type vinyl siloxane ether (Zetaplus, Zhermack, Italy). Facial photographs and marker data were recorded in natural head position and transferred to the laboratory. Digital alignment and virtual articulation (Artex, Germany) were performed. A CAD-CAM resin mock-up (Armaresin, Turkey) was fabricated and evaluated intraorally for esthetics and occlusion. Final restorations were designed as full-arch, screw-retained prostheses using monolithic zirconia (Ceramill Zolid FX, Amann Girrbach, Austria) and torqued to 15 Ncm.

Discussion: The photogrammetry-based workflow demonstrated superior cross-arch accuracy and passive fit compared to conventional techniques. The try-in allowed for verification of occlusal harmony, vertical dimension, and esthetics in a single appointment. Follow-up at 1-, 3-, 6-month, and 1-year intervals revealed no peri-implant complications. The patient reported high satisfaction in function and esthetics. This case highlights the clinical advantages of photogrammetry and monolithic zirconia in streamlining full-arch implant rehabilitation.

Keywords: Photogrammetry, Digital Workflow, Full-Arch Implant Prosthesis, Monolithic Zirconia, Passive Fit

PP-161 Post-core application for an implant with cold-welded and fractured abutment: a 21-month follow-up case report

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INTRODUCTION: Fractured abutments can especially lead to significant and time-consuming complications for both clinicians and patients when the implant body and abutment are cold-welded. The solution is to remove the abutment and re-crown with a new abutment. However, if abutment could not be removed from the implant body, the implant must be removed. This case describes the use of a post-core and implant-supported crown as an alternative approach to implant removal.

CASE DESCRIPTION: A 55-year-old male patient presented with the complaint that the implant-supported crown in the lower right first molar area had fallen off. Although the abutment screw was successfully removed, the cold-welded abutment could not be retrieved from the implant body using various techniques (using manual attempts, ultrasonics). The patient declined implant removal and consented to the proposed post-core treatment. Under water irrigation, the cold-welded abutment part and screw hole were meticulously abraded using an aerator and a tungsten carbide bur. An impression of the screw channel and the implant body surface facing