FROM HOPELESS DENTITION TO IMMEDIATE DENTURES: A FULLY DIGITAL WORKFLOW

Introduction:

To present the digital workflow for the fabrication of removable complete prostheses, from the hopeless dentition to the immediate dentures. To evaluate the effect of the treatment on masticatory performances. Case description:

A 58 year old patient referred to Siena University Prosthodontic Department complaining functional and esthetic discomforts. Anamnestic data and pictures were collected the clinical observation and rx evidenced-hopeless dentition in both arches due to severe periodontal problems. The Digital intraoral scans, a facial scan and the centric relationship were recorded in the same appointment. The treatment plan included the extraction of the teeth and delivery of an immediate post-extraction prostheses. The roots of lower canines were maintained for direct attachments anchorage. The immediate denture were obtained by ivotion oversize milling process (Ivoclar Vivadent). The prostheses were immediately inserted after surgery and maintained during all the healing period. Pre and post insertion evaluations of masticatory performances were evaluated using two colored chewing-gum test and recording maximum bite force (Innobyte, Kube innovation). The patient was collaborative during treatment. No symptoms nor pain were reported either during the immediate post-extractive. In general, the patient reported good esthetic satisfaction and optimal functional comfort. The masticatory performances reported a slight improvement in the followup. Discussion:

The digital workflow for complete dentures fabrication requires short time and effort. The use of an intraoral scanner, a dental CAD software program, and a milling machine allowed the complete digital finalization of the clinical case, resulting in good prostheses adaptation and enhanced esthetic and functional patient's satisfaction.