

# MAXILLOFACIAL PROSTHETIC REHABILITATION WITH IMPLANT-RETAINED ORBITAL PROSTHESIS

Doc. Dr Igor Djordjevic; \* Dr sci. Filip Ivanjac; \*Prof. Dr Vitomir Konstantinovic;  
School of Dental Medicine, University of Belgrade  
Clinic for Prosthodontics\*Clinic for Maxillofacial surgery  
Belgrade, Serbia

## Introduction:

Fabrication of esthetic orbital prostheses is the most difficult challenge in maxillofacial prosthetics, not only because of the technique of manufacturing comparing to the other types of prosthesis, but because of the aesthetic demands that are also very important.

The aim of this case report is to show the clinical procedures in manufacturing of implant retained orbital prosthesis for a patient with acquired postsurgical deformity.

## Case Presentation:

A 54-year old male patient was referred to the Clinic for Maxillofacial surgery, School of Dental Medicine, University of Belgrade with unilateral orbital deformity. After the frontal bone sites were CT evaluated, three disk (Ihde Dental, Switzerland) implants were placed supraorbital lateral. After the osseointegration period, next level was taking an impression by individual open tray method and A-silicone material. As a retention agent, was used Co-Sm magnet (Technovent, UK). After planning and modeling of the substructure on master model. The screw-retained metal substructure was set, wax base adapted and flaked, respectively. Acrylic base plays the role in both magnet and silicon prosthesis holders platform. Magnet was attached to acrylic base by selfcuring acrylic resin. The other part of magnet was bonded to housing at metal substructure by composite glue. After wax sculpting winding-up, orbital prosthesis was converted to addition silicone with previously selected colour. During polymerization, silicone orbital prosthesis was glued with special adhesive to acrylic base. Afterwards, extrinsic coloring of silicone was performed by using appropriate technique of color application and adhesion.

In some patients it may not be possible to replicate the appearance and contour of the remaining normal eye and adjacent orbital structures in a view of shape and size of orbital defect. Considering the existence of differences between color and texture of the skin and the prosthesis, using of magnets as retention agent is the safest method in managing retention problems in orbital area

**Conclusion:** In manufacturing orbital prosthesis it is not only important the technique and skill of but also the artistic talent to mimic the natural anatomical features.

Conflict of interest none declared

