Soung Min Kim et al., J Clin Exp Ophthalmol 2018, Volume 9
DOI: 10.4172/2155-9570-C1-078

19th Global Ophthalmology Summit

February 26-27, 2018 | Berlin, Germany

Silicone orbital and/or facial prosthesis

Soung Min Kim, Mi Young Eo, Yun Ju Cho, T Hoang Truc Nguyen and **Ik Jae Kwon**
Seoul National University, South Korea

The loss of an eye and the associated facial disharmony has major physical, psychological and social consequences for patients undergoing orbital exenteration. Facial composite defects, including those of the eyes, nose, lips, and buccal cheeks, occur mainly because of malignant disease, severe trauma, uncontrolled infection, and animal-bite wounds. In satisfying patient's aesthetic, functional and psychologic desires, many challenges have been reported, including during microvascular flap surgical interventions and in resin-based facial prosthesis fabrication. A magnet-retained prosthesis with an implant has various advantages over both adhesive and spectacle-retained prostheses for reconstruction of the exenterated orbit. Silicone has appropriate physical properties for maxillofacial prosthesis, such as a skin-like texture and being comfortably lightweight, although it has weak edge strength. However, silicone facial prostheses face cementation or adhesion difficulty between the silicone and resin or metal component. The plastic clay used in this report is an exfoliated and intercalated polyurethane organoclay composite that has been used as a raw material for sculpture and the plastic arts. This plastic clay also has a self-decontaminating surface that prevents the outgrowth of pathogenic microorganisms on its surfaces, and this antimicrobial functionality was also approved in recent related articles. This study demonstrates one representative silicone facial prosthesis case with magnet cementation to silicone using plastic clay, which will be applied to various maxillofacial prosthesis strategies in the near future.

Recent Publications

1. Kim S M, Cho Y J, Eo M Y, Kim J S, Lee S K (2017) Silicone facial prosthesia: a preliminary report on silicone adhesion to magnet. J Craniofac. Surg. 29(1):e6-e8.
2. Kim S M, Amponsah E K, Eo M Y, Cho Y J, Lee S K (2017) Pediatric glial heterotopia in the medial canthus. J. Craniofac. Surg. 28(8):e778-e781.
3. Kim S M (2017) Magnet-retained orbital prosthesis using a dental implant. J Craniofac. Surg. 28(2):e151-e152.
4. Kim S M (2017) The removal of an implant beneath the optic canal by modified endoscopic-assisted sinus surgery. Eur. Arch. Otorhinolaryngol. 274(2):1167-1171.

Biography

Oral and Maxillofacial Microvascular Reconstruction Lab, Brong Ahafo Regional Hospital, Sunyani, Ghana Department of Oral and Maxillofacial Surgery, Dental Research Institute, School of Dentistry, Seoul National University, Seoul. South Korea

smin5@snu.ac.kr

Notes: