

Ceramic Implants in the Edentulous Maxilla—An Alternative for Patients with Multiple Incompatibilities?

Clinical report with review of the literature

authors_ Manfred Nilius, Mirela Nilius, Rainhard Goeken, Germany, and Anas Damlakhi, Syria

_In the past few years the demand for biocompatible materials in implant dentistry has increased. Despite the good results of ceramic implants in the esthetic rehabilitation of single teeth, nothing has so far been found in the literature concerning the treatment of complete maxillae/mandibles with ceramic implants.

Patients with multiple material incompatibility and holistic pretreatment are asking more and more often about the possibility of being treated with ceramic materials. The use of one-piece zirconia implants in the edentulous jaw for support is a relative contraindication but may be an alternative for such patients. At the present moment evidence-based studies on the osseointegration of ceramic implants are not yet available. Nor do we know anything about the ideal time of loading or the survival rate of ceramic implants. The present case report describes the treatment of a multi-allergic patient with a fixed maxillary prosthetic restoration by means of ceramic implants and bridges and concludes with a critical review of the studies currently available on the subject of ceramic implants. It is to be stressed that, for forensic reasons, the patient has to be fully and extensively informed and that the surgeon/dentist must be fully aware of the risks involved.

_Case history

A 47-year old female high-school teacher with a reduced residual dentition in the maxilla presents to our clinic requesting a fixed maxillary restoration. The case history revealed multiple allergies to a number of materials including latex, bupivacaine, articaine, lidocaine, chromium-cobalt-molybdenum alloys. The bioresonance analyses showed a metal incompatibility. Her attending physician, a general and nature-cure practitioner, strongly advised against a definitive treatment with titanium implants. The patient asked for advice with respect to a fixed dental restoration made of biocompatible ceramics.

_Clinical findings

The clinical examination showed a retruded position of the maxilla with a periodontically severely compromised non-vital upper right central incisor (with core and post) and left central incisor, a right lateral with an extended carious lesion, and amalgam tattoos of the gingiva in the region of the left lateral and canine. In all, there was transverse vertical and horizontal bone loss with an alveolar mucosa of about 3 mm increasing in thickness in posterior di-



Fig. 1

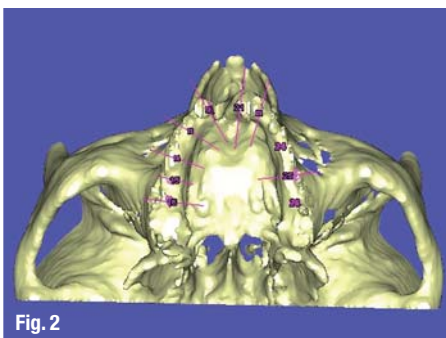


Fig. 2

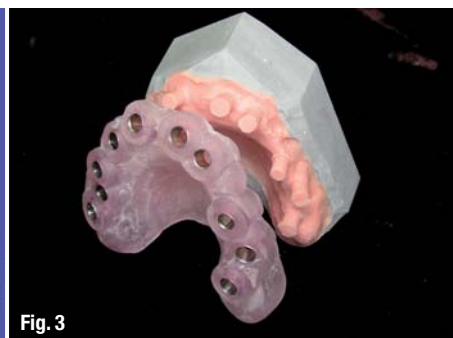


Fig. 3