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Program Speaker – Gerry Raghoebar, DDS, MD

Title
Challenges on Rehabilitation of the Maxilla with Implants: Surgical and Prosthetic Approach

Abstract
Oral rehabilitation of the extremely resorbed edentulous maxilla is challenging. Implants are used to improve the retention and stability of prostheses thereby achieving good oral function. To insert implants a reconstruction with bone grafts is often necessary, in particular when the maxilla is severely resorbed or the maxillary sinus is pneumatized. A variety of maxillary sinus floor augmentation techniques can be applied followed by insertion of endosseous implants and fabrication of an implant-supported maxillary overdenture. The 10 year results will be presented including treatment options after implant failure due to peri implantitis.

There are also situations when additional techniques are needed to provide sufficient support for an implant-supported prothesis. This is often the case after ablative surgery. Subsequently implant placement is often needed to enable oral rehabilitation. Several reconstructive techniques are available. The size and extent of the maxillary defect, patient factors and comorbidities are decisive factors on which surgical, prosthodontic, or combined rehabilitation has to be followed after a maxillectomy. When tumour resection has resulted in a relatively small maxillary defect, primary closure or surgical reconstruction with a local soft tissue flap alone can lead to excellent functional and aesthetic results. For larger maxillary defects, reconstruction with a vascularized flap and/or prosthetic rehabilitation may be needed.

Conventional obturator prostheses have their drawbacks, mainly caused by lack of retention of the prostheses. Placement of implants in the native bone of the maxilla improve retention of the obturator prosthesis thereby increasing the success of prosthetic rehabilitation. This requires sufficient bone volume for reliable implant placement. When the desired implant location from a prosthodontic perspective is not feasible with endosseous implants, zygomatic implants can be used to obtain retention of obturator prostheses. These implants are preferentially placed during the ablative surgery. In this lecture a three-dimensional virtual workflow to secure an accurate placement of zygomatic implants for immediate implant retained prosthetic rehabilitation after maxillectomy will be presented.

Biography

Gerry M. Raghoebar received his DDS and MD degree at the University of Groningen. In 1988 he qualified as oral and maxillofacial surgeon. Since 1988, he is a staff member at the University Medical Center Groningen. He defended his PhD thesis in 1991. In 2006 he was appointed as a professor in Oral and Maxillofacial Surgery and Reconstructive Surgery at the University of Groningen. From 1995 to 2006 he was member of the board of the Dutch Society of Oral Implantology and since 2006 he is honorary member of this society. He is a fellow of the European Board of Oral and Maxillofacial Surgery. His current research efforts are focused on single tooth replacements, the edentulous maxilla, bone and soft tissue augmentation techniques, reconstruction of bone defects, and craniofacial implants. He has (co)authored numerous scientific publications and books.