Conclusion: Buccal myomucosal flap is greatfull flap for intraoral tissue defect reconstruction located at frontal or lateral parts of oral floor, soft and hard palate, also for nasal and orbital reconstruction, that is resonable concerning composition and targeted vascularisation, wich carefuly choosen surgical procedure doesn't compromiting in neck dissection.

PD.233 Functional reconstruction of maxilla with titanium mesh and pedicled buccal fat pad flap

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Introduction: The maxillary defect is always caused by the resection of maxillary tumor or trauma, and the facial malformation and function loss of maxilla give severe physiological and psychological distress to patients. There still are challenges on reconstructing the facial contour and the maxillary sinus, as well as the reconstructing the palatal hard tissue support for a denture. Based on a series of studies on the pedicled buccal fat pad, we used this technique of functional reconstruction of maxilla with titanium mesh and pedicled BFP flap on patients with maxillary defects of type two.

Materials and Methods: 8 patients with maxillary defect caused by tumor resection or trauma were treated by this technique. The maxillary defect was caused by tumor resection and trauma, and the maxillary defect was type two, the age of the patients ranged from 22 to 50 years. The wound healing, facial contour and speech evaluation after operation were observed.

Results: All the patients were followed up from 6 months to 24 months. The wounds healed well with symmetric facial contour, the speech evaluations were also good without food reflu to nasal cavity when eating. The dentitions were restored by removable partial denture in five patients and the function of the dentition was good. The soft tissue covering the titanium mesh in the side of maxillary sinus was normal-like when examined by nasopharyngoscopy five to twelve months after operation in two patients.

Conclusion: Functional maxillary reconstruction could be realized by the new technique using titanium mesh lining with pedicled buccal fat pad flap with symmetric facial contour and satisfactory oral function. The vascularized buccal fat pad flap not only contributes to avoid the exposure of the transplant to the maxillary sinus and nasal cavity and to promote the wound healing, but also enables the restoration of normal physiologic function of the maxillary sinus.

PD.234 The degree of mucosalization of radial forearm flap after its intraoral transposition. Histopathological results in 42 patients

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Introduction: The purpose of the study was to detect the clinical and histopathological changes of the skin pad of the radial forearm free flap in the intraoral tissues after its use in the reconstruction of surgical defects in patients with oral cancer.

Materials and Methods: Forty two patients, 28 male and 14 female with a median age of 50 years were submitted into biopsy of the intraoral part of the skin pad of the radial forearm free flap 3–36 months after the reconstruction of the intraoral defects. In 8 of these patients biopsies were taken twice with a median time lapse between biopsies 24 months. The majority of tumors were squamous cell carcinomas of the tongue and the floor of the mouth. In 32 patients radiotherapy was applied before biopsy and in 10 patients biopsies preceded radiotherapy. The histopathological sections were stained with Hematoxylin and Eocin.

Results: In 14 patients early metaplasia of the skin pad into mucosa was noted. This metaplasia was evident both clinically and histologically. The histopathological findings in these patients included parakeratosis and inflammatory reaction with lymphocytes and plasmocytes. In 6 patients clinical changes of the skin pad were not demonstrated histologically. In the remaining patients both clinical and histological examination of the intraoral skin pad did not show any changes. In all patients subjected to radiotherapy atrophy of the components of the skin was found.

Conclusion: Mucosalization of the skin pad of radial forearm after intraoral transposition was found in 35% of the patients. Factors that influence changes of the skin into tissues resembling those of the oral mucosa are possibly the irradiation during radiotherapy, mechanical forces during eating and the time span between free tissue transfer and the time of the biopsy. The action of fungi like candida albicans that is a common pathogenic and non-pathogenic inhabitant of the oral cavity is another possible factor.

PD.235 Repair of large orbito-maxillofacial defects of resection of tumors by temporalis myofacial flap and facial-cervico-pectoral flap

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Introduction: The surgical treatment of malignant tumors of the orbital and maxillofacial region requires extensive surgery including orbital contents. In larger defects of the midface soft tissue more complex surgical techniques are required. The association of the facio-cervico-pectoral rotation flap (FRF) with the temporalis myofascial flap (TMF) to fill the orbit is an excellent alternative to other pedicled or microsurgical free flaps. The FRF is an anatomical and functional unit which comprises many aesthetic advantages such as skin texture, color and flexibility similar to the rest of facial skin. In this paper we present our experience in the use of FRF or plus TMF to repair primary large orbito-maxillofacial defects after resection of orbital tumors and maxillofacial malignant tumors invasive orbital regions.

Materials and Methods: Six patients with orbital tumors and maxillofacial malignant tumors invasive orbital regions (2 of fibrosarcomas, 2 recurrent sarcomas, one recurrent squamous cell carcinoma and one recurrent basal cell carcinoma) were admitted to the Department of Oral and Maxillofacial Surgery, the Second Affiliated Hospital of Sun Yat-sen University, for treatment between 2003 and 2004. All patients underwent a extensive resection of lesion including exenteration, which provided at least 1-cm margins. Two patients underwent ipsilateral radical neck dissection and five cases also required resection of invasive bone (2 0f the maxillary bone, 2 of the zygomatic bone, and one the mandibula) in the same operation. Soft tissue defects after the excision ranged between 7?6 cm up to 10?8 cm. The defects have had reconstructions with the FRF. In two cases, due to orbital exenteration, the TMF was utilized in order to fill the orbit and give support for the FRT reconstruction. Postoperative radiotherapy was not used.