G Chir Vol. 34 - Suppl 1, 2013 - p. 119
Supplement to n. 5/6, May-June 2013

abstracts

XXV National Congress of the "Società Polispecialistica Italiana dei Giovani Chirurghi"
13-15 June 2013, Bari, Italy

FOREARM VERSUS GROIN FREE FLAP RECONSTRUCTION AFTER HEMIGLOSSECTOMY PROCEDURES

V. ANTONICELLI*, M. DE BENEDITTIS, I. IACHINI, F. DE FEUDIS

Scuola di Specializzazione Chirurgia Maxillo-Facciale Bari, F. Miulli, Acquaviva delle Fonti (Ba) - Università degli Studi di Bari "Aldo Moro", Bari, Italia

Objective: The forearm free flap has been used as the best solution to repair compartmental hemiglossectomy defects. Since2012 we use the Groin flap as alternative to the forearm.
Methods: During the last year we performed 20 hemiglossectomy, 15 repaired with forearm flap while 5 by a groin flap. Preoperative programme for the groin flap was made up by a Doppler ultra-sound examination to identify the superficial branch of the circumflex iliac artery. Skin paddle was designed laterally and distally to the femoral vessels to increase the pedicle length.
Results: The aim of this study is to compare the reliability of the groin flap to the forearm flap. We did not observed any total or partial necroses in all radial forearm reconstructions, while in 3 cases over 5 where we used the groin flap we had good morpho-functional restoration; in 1 case we had the whole necroses of the flap for vascular complications. In the other case, during the operation we verified the suffering of the skin paddle and, we decided to a forearm flap.
Conclusions: The advantages of the modified groin free flap are a less morbidity of the donor site and a forearm comparable pliability, especially in young and thin people. While the groin flap had a short pedicle and small diameter vessels. In elder patients we had lymphorrhagia. The advantages of the forearm flap are the anatomical adequate length and diameter of the donor vessels which give the maximum reliability; its major disadvantage is the non direct closure of the donor site, and not good aesthetic outcomes.

CRANIOFACIAL SURGERY RECONSTRUCTION WITH MULTIPLE REVASCULARIZED FLAPS

A. PETTOLA*, A. ACQUAVIVA, R. BERLOCO, C. RACANO

Scuola di Specializzazione Chirurgia Maxillo-Facciale Bari, F. Miulli, Acquaviva delle Fonti (Ba) - Università degli Studi di Bari "Aldo Moro", Bari, Italia

Objective: The introduction of techniques for free flaps transfers represents a decisive progress of reconstruction methods of complex defects of the maxillofacial region. In particular characterized by extensive loss of substance, such as complex trauma or consequences of post-surgical treatment of T3 and T4 tumors, often require reconstruction of bone and soft-tissue. The most common composite flaps used are not suitable to solve very difficult reconstruction: in these cases it is necessary to perform the reconstruction with two free flaps.
Methods: 60 cases of reconstruction of cranial-facial diseases, treated in the last two years in our Department, were performed using free flaps. In six cases, double microsurgical flaps were used simultaneously: facial bone reconstructions were conducted using different types of free fibula flaps, while soft tissues injury were reconstructed in three cases using radial forearm flap and in other three, using antero-lateral-thigh.
Results: In this study the vitality of microsurgical flaps, surgical time and post-surgical recovery time were evaluated. In all cases there was no total and/or partial loss of flaps and no vascular complications; minor complications, three intra/extra-oral dehiscences were observed. The mean surgical time using double microsurgical flaps was 10.2 hours compared to 7.2 hours of surgical time for single flap . The post-surgical recovery time was comparable to that for reconstruction with single flap.
Conclusions: The authors suggest the use of simultaneous double free flaps reconstruction method when simple flap method can not ensure satisfying morpho-functional results in a single session. In this study the results are similar with those obtained by using single free flap reconstructions.

* *Presenting Author*

G Chir Vol. 34 - Suppl 1, 2013 - p. 120
Supplement to n. 5/6, May-June 2013

abstracts

XXV National Congress of the "Società Polispecialistica Italiana dei Giovani Chirurghi"
13-15 June 2013, Bari, Italy

DECISION-MAKING ALGORITHM IN THE TREATMENT OF ATROPHIC MANDIBLE FRACTURES

F. DE FEUDIS*, M. DE BENEDITTIS, P. VITTORE, V. ANTONICELLI

Scuola di Specializzazione Chirurgia Maxillo-Facciale Bari, F. Miulli, Acquaviva delle Fonti (Ba) - Università degli Studi di Bari "Aldo Moro", Bari, Italia

Objective: Closed treatment of atrophic mandible fractures often results in malunion, pseudoarthrosis and pain. Open reduction and rigid internal fixation (ORIF) is still indicated for displaced atrophic mandible fractures. The Authors report a treatment protocol that allows to gain the best results using reconstruction plates, autologous bone grafting and free fibula flap reconstruction at times.
Methods: Retrospective analysis of 15 patients with atrophic mandible fractures who underwent treatment between 2007 and 2011. 7 cases did not receive any treatment because of general condition, while the others 8 were surgically managed by external approach. In 7 cases load-bearing osteosynthesis plates with locking screws were used; in 2 of them contextual bone grafts were performed; in one case mandible reconstruction needed harvesting a free fibula flap.
Results: In 6 out of 8 cases complete functional and morphological restoration were obtained without any major complication. In one case suppurative infection and necrosis of the bone graft was found, which made necessary its removing, leaving in situ only the reconstruction plate. In another case, during a year after surgical treatment, atrophic mandible resorption occurred from one angle to the other, resulting in loss of the anchoring reconstruction plate.
Conclusions: ORIF is the gold standard procedure for the of atrophic mandible fractures, because it guarantees best morphofunctional outcomes and predictability. Nevertheless the Authors suggest contextual bone grafting in case of substance loss, or a poor quality bone or for dental implant surgery and free fibula flap in selected cases.

UTILIZATION OF 1.5 MM TITANIUM PLATES IN TREATMENT OF MANDIBULAR ANGLE FRACTURE

C. RACANO*, A. ACQUAVIVA, D. MARSANO, A. PETTOLA

Scuola di Specializzazione Chirurgia Maxillo-Facciale Bari, F. Miulli, Acquaviva delle Fonti (Ba) - Università degli Studi Aldo Moro di Bari, Bari, Italia

Objective: In the evaluation of mandibular angle fractures the ideal line of osteosynthesis is represented by the Champy's line and the treatment is the application of a single plate along that "ideal line". The present study aimed to evaluate the approach with a single plate along the lateral border of the jaw in place of the usual treatment with two plates. The purpose is to evaluate efficacy of this method focusing on intra-operative handling, mandibular kinetic and post-operative complications.
Methods: Clinical cases were selected in a period from 2011 to 2012. Ten patients with fracture of the angle were involved in this study. These patients were treated with a single large profile 1.5 mm spaced locking plate with an angular shape, fixed with 8 mm monocortical lock type screws. Has been realized a dual approach (intra-oral and trans-jowl with trocar). Authors rated intra-operative handling and next post-operative stability.
Results: The 1.5 mm plate showed an excellent intra-operative handling and a significant reduction of operative time. In all these cases were not detected complications such as dehiscences, plate exposure or infections. In the 6 months follow-up it was detected an adequate occlusal stability and the correct mandibular kinetic, confirmed with post-operative Rx OPT and/or CT.
Conclusions: As shown by the clinical experience of Authors the application of single large profile 1.5 mm spaced locking plate with an angular shape provides easy handling, adequate occlusal stability and lack of complications as compared to the traditional method with two plates.

---

* *Presenting Author*