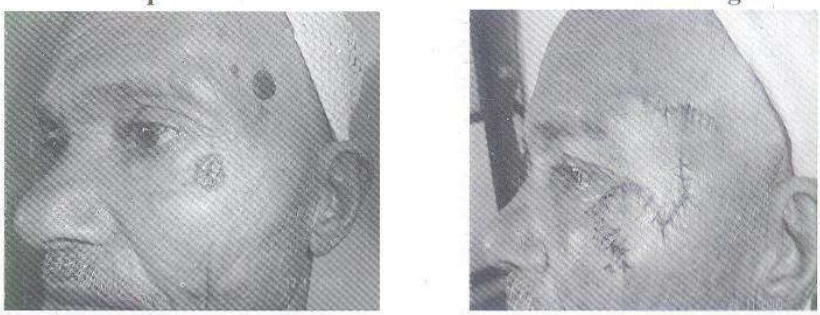
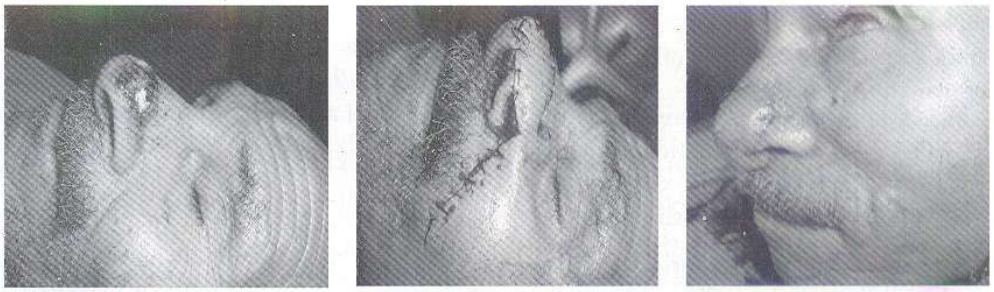
C- Group III: Patients with tumours in the forehead region:



A B

7. Photo A-preoperative show two BCC of the forehead and peri-orbital region. Photo B- Post operative simple closure and rhombic flap

D-Group IV: Patients with tumour in the nasal region:



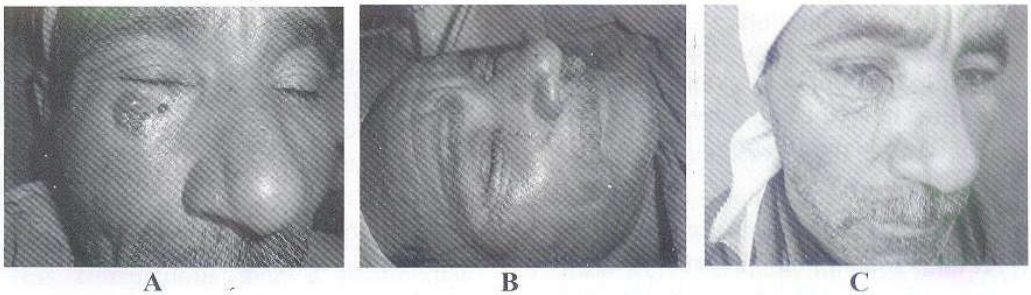
A B C

8. Photo (A) Preoperative picture (BCC of nasal tip) (B) operative picture (Melolabial flap) (C) Post operative picture.

A B C

9. Photo (A) Preoperative picture (BCC of base of the nose) (B)operative picture (mid-forehead flap) (C) Post operative picture.

E-Group V: Patients with tumour in the periorbital region



A B C

10. Photo (A) Preoperative picture (BCC of infra-orbital region) (B) Operative picture (Cheek advancement flap) (C) Post operative picture.

Discussion

The major reconstructive goal is to reestablish functional structural support and soft tissue coverage, maintaining the most aesthetic appearance with minimal distortion. Hom et al[6], stated that the absent tissue should be repaired with like tissue that is similar in color, texture, and thickness. The reconstruction options begin with local tissue as it is an easy procedure, requires in most cases local anaesthesia especially in elder patient who cannot withstand general anaesthesia, supplying us with like tissue, and preserves the more complex reconstructive option for more complex defect. In our series excision and simple closure was done in 34.6% (26/75) of patients, while wedge excision and simple closure was done in 13.3% (10/75) of patients.

The ideal approach for reconstruction is also affected by many clinical factors. These factors include the shape and contour of the wound, potential for compromised healing of flap or grafts, patients at high risk for local tumour recurrence, patient ill suited to undergo surgical reconstruction, and a wound requiring a granulation tissue for receiving grafts. In addition, a desire to decrease the initial size of large facial wounds prior to reconstruction may give an early option for second-intention healing[7].

The expected function and cosmesis resulting from second-intention healing may be superior to that expected from first intention healing[6]. In our series only 4% (3/75) of patients healed by secondary intention for small benign lesions.

However in many patients the ideal approach for reconstruction requires skipping layers on the pyramid and starting with the most complex option[7]. Split-thickness skin grafts have limited usefulness in facial reconstruction because of their tendency to contract. They typically have a different texture as well as color and thickness than the neighboring tissue[6]. In our work, we limited the use of split-thickness skin graft to only one patient who had multiple rodent ulcers of the face.

Omidi et al[8], stated that full-thickness skin grafts are particularly useful for facial defects involving the nasal tip, lateral surface of the auricle, and eyelids as they don't contract and don't change in color or texture. Full-thickness skin graft was used only in 2.6% (2/75) of our patients, for SCC of forehead and BCC of nasal tip.

Local flaps have a wide use in reconstruction of head and neck defects following excised tumours because they enable the surgeon to cover the defect with tissue that is similar in color, texture, and thickness. Rectangular advancement flaps are best designed on the forehead and occasionally useful in the temporal area to restore the hairline or in the perioral area to support the lip[9]. Cheek advancement flap is a large flap which can be used to close central facial defects along the side of the nose[10]. The V-Y advancement flap is one of the most useful local flaps for reconstructing facial defects and can be used in almost all areas of the face. The nasolabial fold, the medial canthal area, the glabellar area, the cheek, and the sides of the nose are all good areas to design V-Y advancement flaps[8]. Cheek rotation flaps can be used anywhere on the face and may be based superiorly or inferiorly. The optimal design of these flaps ensures that the resulting scars reside along the borders of facial aesthetic units[10].

In our series, we performed local flaps in 30.6% (23/75) of our patients for various orofacial tumours.

In management of tumours of the lip is somewhat differ as the lip has its unique anatomical structure and it is important as aesthetic unite. So any defect involves the lip require especial reconstructive procedures. In lesion occupying the vermilion as chronic actinic cheilitis or carcinoma in situ vermilionectomy and mucosal advancement is the treatment of choice[11] which was done in 2 cases represent 2.6% of the patients. A full thickness defect of the lip involve about 2.5cm or at least one third of the lip can be reconstructed by wedge excision and primary closure either M shaped flap or by V shaped flap[11]. They were performed in 22 patients which represent 29.33% of our cases. In surgical defects more than 2.5 cm up to 4.5 cm, reconstruction was done by Abbè and Estlander flap in 3 cases representing 4%. Electromyography studies at one year following reconstruction confirmed the ability of the transferred orbicularis muscle to be re-innervated successfully and restored function as an animated segment.

Tongue flap play a big role in reconstruction of the oral cavity especially in palatal defect. It is easy procedure but need two stages first for application of the flap second to divide the pedicle. We used it in a case of granuloma of hard palate and gum and represented 1.3% of patients.

The forehead flap is a workhorse flap for large nasal defects. Forehead flaps can be designed as either paramedian or a midline flap. The advantage of a midline flap is that the resultant scar is located in the exact centre of the forehead and tends to be less conspicuous than a paramedian one. The forehead flaps can be transferred as interpolated flaps or island flaps[12]. The nasolabial flap can be based either superiorly or inferiorly. Small defects of the nasal ala, nasal tip, and dorsum are easily reconstructed with a superiorly based flap. An inferiorly based flap is ideally suited to close defects of the lip that don't involve the vermillion[13]. We used melolabial flap in two cases

Forehead flap and glabellar flap were used in two cases with a defect in the nose

As regard the distant flaps we usually used it as last option. We used a delto-pectoral flap in a very big defect involve most of the left side of the face after left maxillectomy in case of squamous cell carcinoma of the left maxilla.

Lastly, in dealing with the most common skin tumour of the head and neck, excision was the treatment of choice for most SCCs and BCCs. A standard excision was usually done under local anesthetic, and the tumour was removed with a margin of clinically normal-bearing skin. Selected sections from the specimen were then examined microscopically to determine if the margins are free of tumour. The choice of therapeutic modalities was the same for SCC and BCC. Selection of the most appropriate therapy was dependent on many factors, including size of the tumour, location, whether the tumour is primary or recurrent, histology and individual factors.

After good excision the best modalities for reconstruction were used according to every case. In our series 34.67 % BCC and 17.33 SCC, all were managed by excision.

Finally the aethestic and functional results were evaluated and they were excellent in 64% and very good in 16% of the cases.

Conclusion:

The reconstruction after benign lesion is almost easier and better than malignant tumour and reconstruction after BCC give better cosmetic appearance than SCC.

Still local and simple flaps in the face give the best cosmetic and functional outcome especially in dealing with benign or BCC

Classification of orofacial tumour into five groups facilitate the diagnosis and management.

So although the very high varieties of lesions in the orofacial region but also there is varieties of reconstructive tool that give the patients the best functional and cosmetic outcome even in malignancy.

References:

1. Robinson JK.: Segmental reconstruction of the face: Dermatol. Surg. 2004;30(1):67-74.
2. Abram J, ed: Krau's dental anatomy and 0cclusion, ed 2, St Louis, 1992, Mosby.
3. Thomas Bond's Book Orofacial Soft Tissue Masses Dedicated to Thomas Bond Jr., MD, of Baltimore, Maryland Father of Oral Pathology 2002.
4. Delacure MD:Special consideration in the management of mandible for cancer of oral cavity: current opinion, Otolaryngol Head Neck Surg. 1996;4(2):98-105.
5. Malcom W and Marks C: Fundamentals of plastic surgery 1998:32.
6. Hom DB, Tope WD, Papel Ira D, et al: Facial Plastic and Reconstructive Surgery, Second edition, chap.43. 2002:512-27.
7. Farwell DG and Neal DF: Flap choice in head and neck reconstruction; Facial Plast. Surg. Clin. N.Am. 2003;11:107-19.
8. Omidi M. and Granick MS: The versatile V-Y flap for facial reconstruction; Dermatol. Surg. 2004;30(3):415-20.
9. Alam M. and Goldberg LH: Oblique advancement flap for defect of the lateral nasal supratip; Arch. Dermatol. 2003;139(8): 1039-42.
10. Achauer BM, Eviksson E, Gayuron B, et al. Plastic Surgery: indications, operations, and outcome.2000;3(chap.74):1167-92.
11. Williams EF, Setzen G, Mulraney MJ. Modified Bernard-Burrow advancement and cross lip flap for total lip reconstruction. Arch Otolargynol Head and Neck Surg 1996;122:1253-9.
12. Hariston BR. and Nguyen TH: Innovations in the island pedicle flap for cutaneous facial reconstruction; Dermatol. Surg. 2003;29(4):378-85.
13. Ascari-Raccagni A. and Baldari U: The retroangular flap used in the surgery of nasal tip defects; Dermatol. Surg.2004;30(8):1131-7.
14. American Association of Oral and Maxillofacial Surgeons Feb, 2002.
15. Mark RJ, Ben J, et. al: Post-irradiation sarcoma of the head and neck, Cancer 1993;77:887-93.

أورام الوجه والفم: المشكلة والمخرج

د. سامية سعيد*، د. طارق أبو العز*، د. علاء الدين السيوطى**، د. عاصم الثاني محمد حسن، جمال يوسف*

أقسام جراحة التجميل * والجراحة العامة ** بكلية طب جامعة سوهاج وجامعة اسيوط

أجري هذا البحث في مستشفى سوهاج الجامعي بقسمي جراحة التجميل والجراحة العامة في الفترة ما بين مارس ٢٠٠٤ واكتوبر ٢٠٠٦.

وقد شمل هذا البحث علاج خمسة وسبعين مريضا بأورام مختلفة في الوجه والفم، وقد تم تقسيم المرضى الى خمسة مجموعات تبعا لمكان الورم:

وهذه المجموعات هي: منطقة حول الفم والفم (٣٤ حالة)، منطقة الخد (١٤ حالة)، منطقة الجبهة (١٢ حالة)، منطقة الأنف (١٢ حالة)، ومنطقة حول العين (٣ حالات).

وقد استخدمت طرق مختلفة لإعادة بناء هذه النواقص بعد استئصال الاورام شملت: الشرائح الموضعية، الشريحة الصدرية الكتفية، والرقع الجلدية.

وقد تم تقييم النتائج من الناحية الجمالية والوظيفية بواسطة سؤال المرضى، الصور الفوتوغرافية قبل وبعد العملية والفحص الإكلينيكي، وقد كانت درجات هذا التقييم ممتازة، جيدة او سيئة بالنسبة للحالة الأولية للمرضى.

وكانت النتائج الجمالية والوظيفية العامة ممتازة في ٧٢ % وجيدة في ٢٨ % من الحالات.

وقد نوقشت النتائج واستخلص منها أن الشرائح الموضعية هي أفضل الطرق لإعادة بناء نواقص الوجه لانها تعطي تماثل ممتاز من جهة اللون والتكوين، ولكن لا يمكن استخدام هذه الشرائح إلا في إعادة بناء النواقص متوسطة الحجم.

اما بالنسبة الى الشرائح من اماكن بعيدة فلها دور كبير في إعادة بناء نواقص الوجه خاصة بعد استئصال الاورام الخبيثة الكبيرة.

اما بالنسبة للرقعة الجلدية فقد اثبتت النتائج انها طريقة سهلة وبسيطة وسريعة لإعادة البناء ولكن نتائجها الجمالية عادة غير مرضية.

جامعة سوهاج
كلية طب سوهاج

مجلة سوهاج الطبية

العدد (11) رقم (2) يوليو 2007