Fat Grafting to Improve Parastomal Skin Contour for Ostomy Care

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BACKGROUND: Stomas are common surgical procedures with predictable outcome. When the operation is done properly, there can still be a spectrum of morbidities from poor appliance fitting to chronic skin breakdown. Irregularities in parastomal skin contour secondary to scarring, wound contraction, and change in weight and body habitus are major culprits. In cases where revising the stoma or relocating it are not options, other solutions are necessary. We report our experience with 6 patients who underwent recontouring of the parastomal soft tissue with fat grafting for improved skin contour and ostomy care.

INTERVENTION: Patients were evaluated for contour deformities that were the primary cause for stoma appliance dysfunction. Deformities including skin folds, contracted scars, fat necrosis, and tissue atrophy were identified for fat grafting. Areas of soft tissue prominence and fullness were highlighted for lipectomy via liposuction. In the operating room, the appliances removed, topography and deformities marked in sitting and supine positions. Subcision, fat grafting, and liposuction performed as necessary to the different areas of the abdomen. The goal of the surgery was a 3-cm wide uniform ring around the stoma in the superficial subcutaneous plane. Volumes for the fat grafting and lipectomy varied by patient. Photographs and interviewing performed before and after surgery. We frequently overcorrected the parastomal depressions to account for the 30% anticipated loss of the fat grafted over time. Medical records were reviewed to assess the improvement of postoperative stoma care.

OUTCOME: Six patients underwent parastomal fat grafting from February 2017 to June 2018. Three patients had an end ileostomy: 1 had a loop ileostomy, 1 with a chronic enterocutaneous fistula with ostomy appliance, and 1 patient had a urostomy. An average of 192.5 ml lipoaspirate was harvested (range, 120–350 ml), and 108 ml of filtrated and washed fat was grafted (range, 58–230 ml). Lipectomy via liposuction to the target area was performed in 2 patients. Average fat aspiration was 85 ml (75 and 110 ml). One patient had near-complete resolution of leaks after the surgery, and no major issues were reported after 1 year from the procedure. Two patients had major improvement of appliance seal with short-term follow-up. Three patients had partial improvement in seal when compared with continuous leakage preoperatively. No complications were related to the procedure.

CONCLUSIONS: Fat grafting is a novel and safe technique that could provide a solution for difficult stoma. Partial improvements can have a significant positive impact on lifestyle. The procedure can be repeated if necessary. This is especially useful when patients have prohibitive risks to have further transabdominal procedures. Larger sample size and long-term follow-up will be needed for further assessment of the outcomes.

Long-term Results of Unilateral Cleft Lip Repair With Multiple Infantile Hemangiomas Including the Cleft Side of the Upper Lip

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PURPOSE: Cleft lip and infantile hemangioma are relatively common congenital diseases. However, infantile hemangiomas on the cleft side, in the operative field of cleft lip, are extremely rare, and no clear guidelines have been established for their treatment. We experienced a case in which a patient with a cleft lip had infantile hemangioma on the cleft side. We performed cleft lip repair on a patient with infantile hemangioma on the cleft side of the cleft lip at 3 months after birth and have been following-up on the patient for the past 18 years. We report the results of 18-year follow-up after the surgery of this rare patient.

METHODS: The male patient was diagnosed with a left unilateral complete cleft lip with alveolar cleft and a submucous cleft palate. There were multiple infantile hemangiomas throughout his body, with no notable abnormalities in the chromosomal analysis. In particular, the patient had infantile hemangiomas on the upper lip and lower lip, right ear helix, back, and left shoulder. The hemangioma on the upper lip was on the lateral segment of the cleft side. As per the general treatment guidelines, cleft repair was performed at 3
months after birth. Millard’s rotation advancement technique was used for the repair, which uses the lower small triangular flap. The patient was followed up for 18 years after surgery.

RESULTS: There was no excessive bleeding during the surgery, and blood transfusion was not needed. The excised tissue was confirmed to be infantile hemangioma in the histopathologic examination. The patient did not show any abnormalities during recovery, and there was some residue of infantile hemangioma in the repair site in the upper lip vermilion. The residual infantile hemangioma in the repair site of the upper lip vermilion was involuted by 5 years old, and there was only a normal degree of scarring after cleft lip repair of the upper lip vermilion. At the same time, the infantile hemangiomas in the right ear helix, back, and left shoulder were completely involuted without any scarring. The patient has been followed up until now, and at 18 years, he has no particular problems other than the red scar on the lower lip.

CONCLUSION: Infantile hemangiomas requiring lip repair for unilateral complete cleft lip are extremely rare, and there are no established surgical guidelines for this condition. In such cases, delaying lip repair until the infantile hemangioma is involuted may not be desirable for obtaining the best esthetic outcome, and it is also not desirable because it may induce psychosocial impairment in patients and caregivers. Therefore, we believe that general cleft lip repair produces good outcomes even in cases involving hemangiomas on the cleft side.

Isolated Orbital Fractures Are Associated With Cranial and Cervical Spine Injuries

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PURPOSE: Fractures of the orbit often co-associate with a variety of cranial and cervical spine injuries. However, these cranial and cervical spine injuries are more often seen in the context of rim-involving orbital fractures. There is paucity of published data detailing the incidence or patterns of cranial and cervical spine injuries that occur in association with isolated (rim-sparing) orbital fractures. The objective of this study is to investigate whether specific locations of isolated (rim-sparing) orbital fractures are associated with cranial and cervical spine injuries.

METHODS: Retrospective review of patients presenting with orbital fractures to a level I trauma center from 2015 to 2017. We reviewed craniomaxillofacial computed tomography scans for each patient to identify location and patterns of orbital fractures. We excluded fractures that involved the orbital rim(s), and bilateral orbital fractures and fractures sustained from penetrating injury. Associated injuries including cranial, skull base, or cervical spine fractures, intracranial bleed, cerebral contusion, and cervical spine soft tissue injuries were abstracted from the medical record.

RESULTS: Five hundred sixty-eight orbital fractures were identified, of which 217 (38%) had no rim involvement. Two hundred two (93%) of these were unilateral rim-sparing fractures that qualified for inclusion in our analyses. The most prevalent mechanisms of injury were assaults (40%), falls (24%), and motor vehicle accidents (20%). The most common isolated orbital fractures were orbital floor blowouts (n = 132; 65%), medial wall fractures (n = 92; 46%), and 2 wall fractures involving both the floor and medial wall (n = 40; 20%). Single-wall orbital floor blowout fractures had the lowest rates of associated cranial or cervical spine injuries (5% with calvarial, skull base, or cervical spine fractures and 16% with intracranial bleed). Single-wall orbital roof blow-in fractures and single-wall lateral orbital wall fractures were uncommon (10% and 3%, respectively). However, these fractures were associated with significantly higher rates of calvarial, skull base, or cervical spine fractures (35%, \( P = 0.0001 \) for roof blow-in; and 33%, \( P = 0.0096 \) for lateral wall) and higher rates of intracranial bleed (55%, \( P = 0.0003 \) and 50%, \( P = 0.0390 \), versus single-wall orbital floor fractures. Among the patients who sustained single-wall orbital roof blow-in or lateral wall fractures, only 15% and 33%, respectively, had no associated cranial or cervical spine injuries.

CONCLUSIONS: Overall, these findings suggest that isolated roof and lateral wall fractures have statistically significant higher rates of associated cranial and cervical spine injuries. Surgeons that encounter orbital roof blow-in or lateral orbital wall fractures should have heightened suspicion for cranial and cervical spine injuries.

Long-term Results of Mandibular Reconstruction Using Mandibular Reconstruction Plate After Resection of Mandibular Region Against Malignant Tumor

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