conservatively. None of the patients had sensory, speech, chewing and laughing problems after surgery. Temporary sagging of upper lip related to levator muscle damage was seen in one patient, but it improved at 6th month. Three patients were good and 7 patients were very good satisfied with nasal shape and face symmetry. Nine patients reported that the donor side of the face looked like younger than other; one of them didn’t. Nasolabial scar healed uneventfully in all patients.

CONCLUSION: Various flaps have been defined for nasal tip defects. However, many flaps cause donor site morbidity, seconder intervention for defatting and revision, stage repair. Superior pedicle nasolabial island flap is an alternative flaps used in nasal reconstruction because of texture and color matching, minimal donor site morbidity, good and constant nutrition, safety and transportability to all nasal subunits.

Reference Citations:
1. Nogushi M, Matsuo K, Hirose T. Reconstruction of short nose deformity using nasolabial flaps pedicled on the infraorbital vessels. Br J Plast Surg. 1991;44:567–569.
2. Turan A, Kul Z, Türkaslan T, et al. Reconstruction of lower half defects of the nose with the lateral nasal artery pedicle nasolabial island flap. Plast Reconstr Surg. 2007;119:1767-1772
3. Cox A, Fort M. Nasal Reconstruction Involving Multiple Subunit Defects. Facial Plast Surg. 2017 Feb;33(1):58–66.

Rapidly Progressing Skull Osteolytic Metastasis Originated from Lung Squamous Cell Carcinoma Presenting as Forehead Hematoma

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INTRODUCTION: While the bone is a well-documented metastatic site of lung cancer, the incidence of metastasis to the skull is low. Furthermore, squamous cell carcinoma of the lung with rapidly progressing skull osteolytic metastasis is extremely rare. We report a rare case of a patient with a lung squamous cell carcinoma presenting as forehead hematoma

METHODS AND RESULTS: An 84-year-old male patient presented a 1-month history of a forehead hematoma. His medical history was unremarkable except 30 pack-year smoking history. The patient incurred a minor trauma on his forehead 1 month before. He received an incision and drainage procedure at a local clinic. However, the hematoma gradually increased in size. Examination revealed a hard, non-tender solitary mass with ulcerated skin measuring 6.5 × 6.0 cm on the right frontal area. We performed an excision, and biopsy revealed a moderately differentiated squamous cell carcinoma with a desmoplastic stromal reaction. A computed tomography scan demonstrated a skull metastasis with destruction of the frontal bone and extension of the lesion into the extracranial soft tissues. Chest PA examination performed on the day of admission showed an extensive right-sided opacity. Chest CT revealed a mass in the right lower lobe measuring 6.7 cm with a loculated right pleural effusion. The chest radiograph was suggestive of carcinoma of the lung as the primary tumor. However, the patient wanted to receive only conservative management and refused additional evaluation and treatment. Thus, we planned a hematoma evacuation and simple debulking surgery with consent from the patient.

CONCLUSION: Several cases of metastatic lung adenocarcinoma metastasizing to the skull have been reported. However, the case reported herein is a rare case of osteolytic skull squamous cell carcinoma presenting as forehead hematoma originating from the lung, particularly in a short term of within 1 month. The present case is interesting because of the presenting feature of the underlying lung carcinoma was an osteolytic metastatic lesion in the skull, concealed by forehead hematoma. In our case, forehead hematoma was only presenting symptom. Despite the rarity of malignancy of forehead hematomas, consensus has been reached that malignancy should be suspected in cases of lesions that are large and rapidly changing in size, and that an associated microscopic study of lesion should be performed to exclude malignancy.

Analysis of Post-Operative Reoperation Timing and Risk Factors for Post-Operative Free Flap Compromise in Head and Neck Reconstruction: A National Retrospective Cohort
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**INTRODUCTION:** Unplanned reoperation, specifically for free flap compromise, following head and neck reconstruction can exert a significant toll on the healthcare system and its resources. The timing of the different indications for reoperation remains to be elucidated. Given that the National Surgical Quality Improvement Program (NSQIP) groups all causes of unplanned reoperations into a single variable, we aim to identify the rates and timing of various indications for reoperation and the independent predictors of head and neck free flap compromise.

**METHODS:** A retrospective review of all patients who underwent head and neck free flap reconstruction for a malignant head and neck lesion was done in the ACS-NSQIP database 2012–2014. CPT codes 15756, 15757, and 15758 were identified to determine free flap reconstruction. Preoperative demographics, intraoperative variables and postoperative surgical morbidities were identified. Manual identification of ICD-9 codes allowed for determination of cause of reoperation. Subgroup analysis of mean time to reoperation was performed. Multivariate logistic regression was used to identify the independent predictors of unplanned free flap reoperation in the head and neck free flap population. An increased operative time was defined as >75%-tile (612 minutes).

**RESULTS:** From 2012–2014, a total of 300 patients underwent head and neck free flaps. 62 patients (20.7 percent) underwent an unplanned reoperation. Most common reasons for unplanned reoperation were hematoma (19.4%), flap failure (19.4%) and a systematic vascular reason (17.7%). Mean time to reoperation was earliest in the hematoma cohort (4.33 ± 6.11 days) and flap failure cohort (4.92 ± 7.37 days). Latest time to reoperation was in the infec- tion cohort (14.00 ± 4.85 days) and dehiscence cohort (13.50 ± 5.57 days). On multivariate logistic regression, independent risk factors for unplanned free flap reoperation (p < 0.05) included an ASA >3 [adjusted OR, 6.04 (95 percent CI 1.40 to 26.07), adjusted p = 0.022] and an increased operative time in minutes [adjusted OR, 5.21 (95 percent CI, 1.54 to 17.64), adjusted p = 0.009].

**CONCLUSION:** National data indicates that complication rates are high in head and neck reconstruction for malignancy. Patients with independent risk factors for reoperation should be monitored more closely to reduce the severity of these complications. Development of a clinical risk calculator may help patient decision making by tailoring information on risk of complications.

**Botox Salvage of Ischemic Hand Trauma**  
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**INTRODUCTION:** Effective use of botulinum toxin A (Botox) to improve blood flow in difficult to manage chronic vasospastic disorders of the hand, such as in Reynaund’s disease and sclero-derma has been appreciated for several years. Botox’s efficacy in salvaging ischemic loss in digits in acute traumatic and iatrogenic injury has not been previously reported.

**MATERIALS AND METHODS:** From February 2015 to December 2016, 11 patients at our Level 1 Trauma Center presented to the hand surgery service with early or late ischemic injury and vascular compromise to one or more fingers as a result of crush injury, direct drug injection or proximal arterial injury from use of the radial artery in catheterization. This group was precluded from treatment with intravenous thrombolytic agents because of poly-trauma, contraindicated medical illness, or pregnancy. Prior to 2015, all patients with vascular compromise (mottling, coolness to touch, diminished capillary refill, resting pain) were treated with a protocol of aspirin, protective dressings and a warm milieu. Starting in January 2016 patients were treated with injection of 80–100 units of Botox into the palm in addition to our previous standard protocol.

**RESULTS:** From February to December 2015, six (6) patients with vascular compromise (mottling, coolness to touch, diminished capillary refill, resting pain) to one or more fingers were treated with a protocol of aspirin, protective dressings and a