intersections. Course of the intercostal nerve of the dissected third page was identified from the T7 to T12 thoracic intercostal nerve with electromyograph(EMG). The medial part of the dissected muscle page was elevated with this intercostal nerve and medial perforators of the deep inferior epigastric vessels. Flap was folded in length and inserted to the lower lip defect. Anastomoses were completed to the ipsilateral facial artery, epigastric vein and marginal mandibular branch of the facial nerve. The muscle flap was completely covered with skin graft. Donor side was closed primary. Lower lips were evaluated with physical examination including oral competants and drooling, sensory examination with Semmes Weinstein Monoflament tests and functional examination with EMG. Patients were followed for 18 month, 25 month and 38 month respectively.

RESULTS: Two patients were male, other was female. Ages of them were 64, 79 and 83 years old. There was no complication after free flap surgery. While all flaps were bulky at the first 3 month, dimensions of flaps reduced to 12th months. Color differantion with surrounding tissues, drooling and articulation problem was improved three months after surgery. Motor innervation and sensation of the reconstructed part was acceptable after 12th month after surgery. There was no abdominal hernia and bulging, limitation of trunk flexion and extension in all patients. All patients were satisfied with final appearance. The donor area scar was ignored by patients.

CONCLUSION: Various flap options have been reported for aesthetic and functional reconstruction of large full thickness defects of lower lip. The free partial medial rectus muscle flap is also an alternative flap for full-thickness large defects of lower lip with good aesthetic and functional results, preserving function of the abdominal muscle.

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Can Same Local Mucosal Tissue be Used for Recurrent Palatal Fistulas?

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PURPOSE: The purpose of this study is to obtain clues about the quality and usability of peri-fistular local tissue in recurrent fistulas operations from the results of patients who have undergone fistula surgery.

MATERIALS AND METHODS: In this retrospective study, 53 fistula repair operations performed between 2009 and 2016 were classified as group 1 (successful results, n:33) and group 2 (unsuccessful results, n:20). These groups were subgrouped as operated by using local tissues (local tissue group, LTG), and using regional tissues (regional tissue group, RTG). Regional tissue group has been excluded from the study. Peri-fistular local tissue was investigated from intraoperative photos for all patients. Perifistular tissues scored according to, presence of a whiter tissue different from the normal palatal mucosa like scar tissue (there is: 1 point, there isn’t: 0 point), clearing of the palatal rugas (there is: 1 point, there isn’t: 0 point), the presence of a flatter and thin palatal tissue around the fistula (there is: 1 point, there isn’t: 0 point). 26 of group 1 were treated using local tissues. It was seen that the 22 of patients had up to 1 point mentioned above. 17 of the group 2 were treated using local tissues. It was seen that the 9 of patients had up to 1 point mentioned above.

RESULTS: 53 fistula operations performed in 43 patients were evaluated. Patient’s ages ranged from 2 to 45 years with a mean age of 20.4 years. Twenty of these patients were male and 23 were female. After the groups were designed as mentioned above, Chi-Square test analysis results were obtained with the Spss15.0 program. According to this; the success rate is 7.7% in patients had 2 or more points. This rate was 72.7% when the patients had 1 or less points.

DISCUSSION: The incidence of fistula after primer palatoplasty ranges between 15–65%. Any unsuccessful surgery applied to the fistulas not only may result in formation of larger fistulas, but also may not provide adequate occlusion due to the contraction phase of wound healing. When choosing the fistula repair method, it will be helpful for us to examine the local tissue condition in addition to the factors such as the type of fistula, localization, age of the patient, and patient’s compliance. According to factors that mentioned above, it can be say, 2 or more point means that using of the local tissues to cover a fistula will most likely to fail. It is more rational to use regional or distant tissue in such situations.
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Microanatomy of Sensory Nerves in the Upper Eyelid: A Cadaveric Anatomical Study

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BACKGROUND: Plastic surgery requires detailed knowledge of upper eyelid anatomy, but few authors have sufficiently described the specifics of upper eyelid nerve anatomy. This study aimed to provide a thorough description of sensory nerve anatomy in the upper eyelid and to propose considerations for upper eyelid surgery.

METHODS: Sixteen orbits were dissected from sixteen fixed, adult human cadavers. Microscopically, we identified the main trunks of the infratrochlear, supratrochlear, and supraorbital nerves and all branches that projected toward the upper eyelid. The number, size, and distribution of nerve branches were recorded.

RESULTS: The branches of the infratrochlear, supratrochlear, and supraorbital nerves covered a wide range in the upper eyelid. The mean numbers of branches/nerve were 1.6±1.2, 3.2±1.5, and 2.6±1.4, respectively. The branches of the infratrochlear nerve were distributed throughout the medial area of the upper eyelid. Those of the supratrochlear nerve were distributed throughout the medial and central areas, and the palpebral branches of the supraorbital nerve were distributed throughout the central and lateral areas of the upper eyelid. The lateral branches of the supraorbital nerve and the cutaneous branches of the lacrimal nerve were distributed in the lateral region of the orbit.

CONCLUSION: We show that upper eyelid sensation is transmitted mainly by the supratrochlear and supraorbital nerves, and we provide a map of the distribution of upper eyelid sensory nerves. This precise anatomical knowledge about upper eyelid sensory nerves will facilitate pain control and help minimize nerve injuries during surgery.

Vascularized Bone Flaps in Extremity Reconstruction: A Case Series

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PURPOSE: Composite tissue defects encompassing bone and/or isolated bony defects can be challenging and critical for successful functional limb salvage. Vascularized bone flaps (VBFs) can provide a one-stage solution for autologous bony replacement in situations with large or complex bone defects and are often superior options compared with nonvascularized bone grafts or non-bone internal fixation techniques.

METHODS: A retrospective review of VBFs performed by a single surgeon over a seven year period was conducted.

RESULTS: Twenty-seven total VBFs were completed for traumatic, oncologic, and congenital cases. Patient age ranged from 5 to 64 years with the majority of patients being younger than 30 years old. Anatomical bony reconstructions included 13 upper versus 11 lower extremity defects and 3 pelvic defects. Etiology of injuries included 16 traumatic, 6 oncologic (3 of which were pediatric cases), and 5 degenerative bony states. Successful union or bone healing was observed in 26 of 27 cases, with the following complications noted: 2 cases of delayed soft tissue wound healing and 1 case of complete resorption of a fibula bone flap requiring salvage with an expandable megaprosthetic and additional soft tissue flap coverage.

CONCLUSION: VBFs have critical roles in successful limb salvage outcomes where certain bony defects are encountered. As evidenced in our series, VBFs provide reliable single stage autologous bony reconstructions with