

were operated using the technique of conchal cartilage reinforcement of earlobe. 28 females had bilateral involvement and the remaining had unilateral tear. 25 women had a previous failed repair with earlobe scarring. A conchal cartilage disc was harvested at time of repair of earlobe. This disc was placed in a pocket created in the earlobe over which the earlobe was repaired. The conchal disc was modified by creating a hole of 5 mm diameter for placing the new hole. Simultaneous reperforation of the earlobe was done through this new hole and stud earring was applied.

RESULTS: Satisfactory aesthetic and functional results have been obtained in the series using the technique of conchal cartilage graft augmentation of the ear lobe in the last five years of use of this technique. All patients had high degree of satisfaction as being able to come out of the operating room with earrings on. There has been no stretching or re-tear of the earlobe following implantation of the conchal cartilage over a follow-up period of 4 years.

CONCLUSION: The conchal cartilage graft sandwich procedure allows immediate reperforation of the repaired earlobe at the time of repair in a central aesthetic location along with providing necessary strength to the earlobe thus preventing recurrence in primary and recurrent acquired split earlobe deformity.

Liposome Bupivacaine for Postoperative Pain Control for Labiaplasty

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PURPOSE: Labiaplasty has first reported by Honore and O'Hara in 1978. According to ISAPS global statistics, it increased by 45 percent in 2016 as the most increasing aesthetic surgery. The same is true in Japan, I operate more than 400 patients every year. As the patients feel inconvenience with their oversized labia, they are highly satisfied after surgery. However, postoperative pain seems to be severer than other parts of the body. We report some results in postoperative pain control for labiaplasty using liposome bupivacaine.

METHODS AND MATERIALS: For the patients who had labiaplasty in our clinic from May to October 2017,

we injected liposome bupivacaine (Exparel®, Pacira Pharmaceuticals, USA) to one side of labia and Lidocaine Injection 1% with Epinephrine to the other at the last of the surgery, and analyzed the pain with Numerical Rating Scale (NRS) and the number of times of analgesic use until the postoperative day 7.

RESULTS: Throughout six-month follow-up, no patients had any complication or complaint with operation. The pain was 82% less severe on the side with Exparel® on the day of operation, 69% on 1POD, 66% on 2POD, 56% on 3POD and 57% on 7POD. Average number of analgesic use was 4.0 ± 4.1 , and Exparel® provided greater effects to the patients who used more analgesic than average. It was more effective as earlier postoperative time.

CONCLUSION: It's considered to be effective to use liposome bupivacaine for the postoperative pain control of labiaplasty. However, the surgeon should be careful not to miss the perioperative complication with less pain.

CRANIOMAXILLOFACIAL/HEAD & NECK SESSION 2

Customized Alloplastic Temporomandibular Joint Reconstruction: Expanding the Reconstructive "Net"

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PURPOSE: Customized alloplastic temporomandibular joint (TMJ) reconstruction has been well established for refractory ankyloses and arthroses,¹ trauma and end-stage TMJ disease in adult patients. However, its use in congenital absence or deficiency of the TMJ in younger patients is not well defined.^{2,3} The goal of this study was to present outcomes of patients with congenital mandibular defects who underwent customized alloplastic TMJ reconstruction simultaneous with orthognathic surgery.

METHODS: A retrospective case series of patients who underwent customized alloplastic TMJ reconstruction concurrent with virtual surgical planning-guided orthognathic surgery (2014–2017) was completed. Anatomic, functional, and complication outcomes were documented.

RESULTS: Five TMJs in 4 patients (1 bilateral, 3 unilateral) were reconstructed. Causes of TMJ absence included Goldenhar Syndrome (2), idiopathic bilateral condylar resorption (1), and post-oncologic in a patient with Gorlin Syndrome (1). The two patients with Goldenhar Syndrome had previous attempts at reconstructive surgery with poor results (distraction, bone grafting, alloplastic implants). All patients were skeletally mature at the time of surgery, had virtual surgical planning and had concomitant maxillomandibular orthognathic surgery at the time of TMJ reconstruction. All patients had improved post-operative occlusal results. Three of 4 patients had >30 millimeters post-operative maximal incisal opening. Complications included revision of implant position (1), ear canal perforation (1), and frontal branch of facial nerve injury requiring secondary brow lift (1). There were no infections or other implant-related complications. Mean follow up was 1.32 years (range, 0.46–2.74 years).

CONCLUSION: We present a growing series of patients with congenital mandibular defects who underwent successful custom alloplastic TMJ reconstruction with pre-operative virtual surgical planning. Such reconstruction at the time of skeletal maturity for patients with congenital mandibular TMJ defects may present an alternative to existing treatment options, such as mandibular distraction, bone grafting, and prosthesis completed during skeletal immaturity.^{2,4,5}

REFERENCES:

1. Dang RR, Mehra P. Alloplastic reconstruction of the temporomandibular joint. *J Istanbul Univ Fac Dent*. 2017;51(3 Suppl 1):S31-S40. doi:10.17096/jiufd.87994.
2. Resnick CM. Temporomandibular Joint Reconstruction in the Growing Child. *Oral and Maxillofacial Surgery Clinics of NA*. 2018;30(1):109–121. doi:10.1016/j.coms.2017.08.006.
3. Wolford LM, Bourland TC, Rodrigues D, Perez DE, Limoeiro E. Successful reconstruction of nongrowing hemifacial microsomia patients with unilateral temporomandibular joint total joint prosthesis and orthognathic surgery. *J Oral Maxillofac Surg*. 2012;70(12):2835–2853. doi:10.1016/j.joms.2012.02.010.
4. Tahiri Y, Chang CS, Tuin J, et al. Costochondral grafting in craniofacial microsomia. *Plastic*

and Reconstructive Surgery. 2015;135(2):530–541. doi:10.1097/PRS.0000000000000914.

5. Wan DC, Taub PJ, Allam KA, et al. Distraction osteogenesis of costochondral rib grafts and treatment algorithm for severely hypoplastic mandibles. *Plastic and Reconstructive Surgery*. 2011;127(5):2005–2013. doi:10.1097/PRS.0b013e31820cf4d6.

Prolonged Antibiotic Duration Does Not Affect Surgical Site Infection Rates in Traumatic Mandible Fracture

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INTRODUCTION: The appropriate duration of antibiotic (Abx) therapy for surgical site infection (SSI) prevention in traumatic mandibular fracture repair is unknown. Data regarding the appropriate duration of therapy are lacking in this patient population and practices vary significantly. The objective of this study was to characterize antibiotic duration and outcomes following surgical repair of traumatic mandibular fracture.

METHODS: A single-center, retrospective analysis of all adult patients from January 2014– December 2016 with a mandible fracture who underwent surgical repair was performed. Patients were identified from the Trauma Division Registry using ICD-9 and ICD-10 codes. Standard Centers for Disease Control and Prevention (CDC) definitions were used to categorize SSIs. Abx, SSI, and culture data were manually collected from the medical record. Operative service was categorized between Otolaryngology service (ES), Plastic and Reconstructive service (PS), and Oral maxillofacial service (OS). Other indications for giving Abx were identified (including sinus fractures, non-Head and Neck infections such as intraabdominal infections, urinary tract infections, and pulmonary infections). Post-operative outcomes were defined as hospital Length of Stay (LOS), intensive care unit (ICU) LOS,