The TMJ received 1 – 3 direct branches (maximal diameter 0.7–0.8 mm) from the maxillary and middle meningeal arteries medially, and the superficial temporal artery laterally. Fixation of TMJ on zygomatic processes minimally increased the intercondylar distance on recipient face. However, transplanted joints were located more inferior and anterior compared to their normal anatomical position. Class 1 original donor occlusion was achieved with normal ramal inclination and mandibular range of motion.

CONCLUSION: We demonstrated that TMJ-included total face allograft procurement and transplantation is technically and functionally feasible and reasonable occlusion, range of motion and lateral excursions is achievable.

One-Stage Reconstruction Using Dual Innervated Double Muscle Flap Transplantation for Re-Animation of Established Facial Paralysis

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BACKGROUND: A natural smile involves several facial expression muscles. Conventional dynamic reconstruction with a single muscle flap only restores unidirectional movement. Early flap reinnervation prevents atrophy. We describe our one-stage double-muscle reconstruction technique comprising latissimus dorsi (LD) and serratus anterior (SA) flaps, dually reinnervated by the contralateral facial nerve (FN) and ipsilateral masseter nerve (MN) with successful outcomes for reanimation of facial paralysis.

METHODS: We used this technique in two facial paralysis patients. A double-muscle flap comprising a left LD and a fifth left SA flap was harvested with the thoracodorsal artery and vein; a 15-cm thoracodorsal nerve (TN) section attached to the LD flap; and 5-cm and 1-cm long thoracic nerve (LTN) sections at the proximal and the distal sides of the SA flap. The buccal branch of the contralateral FN was exposed and the ipsilateral masseter was incised exposing the masseteric nerve. The LD and SA flaps were sutured along the directions of motion of the zygomaticus major and risorius, respectively, in a pocket from the corner of the mouth to the anterior portion of the auricula; the thoracodorsal artery and vein were anastomosed with the facial artery and vein. The contralateral FN and ipsilateral MN were interconnected by triple nerve suturing for dual innervation of two flaps: medial branch of TN to the distal end of the LTN; the proximal end of the LTN to the ipsilateral MN, and the buccal branch of the contralateral FN to the main trunk of the TN. The recipient site was closed conventionally.

RESULTS: Good contraction of the transferred flaps resulted in good smile reconstruction. No donor site complication, such as difficulty in abduction was observed.

CONCLUSION: Fast axonal outgrowth from the ipsilateral MN achieved swift reinnervation of the SA flap via the long thoracic nerve, and the LD flap via the medial branch of the TN, preventing atrophy of both flaps. Axonal outgrowth from the buccal branch of the contralateral FN dually reinnervated both flaps, enabling reanimation of a natural symmetrical smile.

Swallowing Outcomes of Hypopharyngeal Reconstruction with Free Jejunal Flap - Retrospective Statistical Analysis of 83 Consecutive Cases in Japanese Single Institution -

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INTRODUCTION: Total pharyngo-laryngo-esophagectomy (TPLE) and free jejunal flap (FJ) reconstruction has been a widely used procedure for extensive hypopharyngeal or laryngeal cancer. There are several reports that assess swallowing outcomes of hypopharyngeal reconstruction with FJ flap. Pre/postoperative irradiation, chemotherapy and resection of lateral retropharyngeal (Rouviere) lymph nodes are known factors to influence postoperative