ABSTRACT

Objectives

Report a viable reconstructive alternative after parotid gland mucoepidermoid carcinoma resection, rendering a large facial defect and facial nerve palsy. Demonstrate the combination of temporalis muscle perforated flap and microvascular fasciocutaneous radial forearm flap, fulfilling three purposes: bulk restitution, facial parasthesia reanimation and adequate skin replacement for acceptable aesthetics.

Methods

Facial defect was left after radical parotidectomy with facial nerve sacrifice, as well as masseter and pterygoid muscles, mandibular periosteum and skin removal. Reconstruction of the large defect was achieved by using a temproal muscle transposition combined with fasciocutaneous radial forearm flap. Facial artery and vein were used for microvascular sutures. The necessity of the head and neck surgeon to make aggressive interventions has enabled the usage of flaps for reanimation of significant facial defects. Satisfactory results require careful three-dimensional thought, adequate texture matching as well as functional restoration. The results showed that temporalis muscle transposition was a successful method for bulk restitution and maximization of permanent facial expression after radical parotidectomy. In addition, the temporalis muscle creates a bulk of tissue that can be mobilized and used for reconstruction of defects of the skin, eye lid, mandible, and mouth, by tension provided to orbicularis oris and orbicularis oculi muscles. Fasciocutaneous radial forearm flap provided the best possible tissue color and contour restoration of skin and is a pliable tissue.

Conclusion

Radial forearm flap and temporalis muscle transposition combined offers a viable reconstructive option after radical parotidectomy resulting in acceptable aesthetic and functional outcomes. Radial forearm flap was a good choice for skin restitution. Temporalis muscle transposition proved to be adequate both for bulk restitution as well as reanimation of facial palsy.

Locally advanced high grade parotid mucopidermoid carcinoma resulted in a large and complex tridimensional defect after radical parotidectomy. Overlaying skin, facial nerve, masseter muscle, lateral pterygoid muscle and mandibular periosteum were sacrificed.

The first step of reconstruction focused on restituting bulk as simultaneously achieving dynamic facial reanimation using temporal muscle transposition. Temporal muscle fibers were separated and sutured to orbicularis oris and risorius muscles and to orbicularis oculi muscle offering tension to the lip and eyelid while fulfilling the defect.

Fasciocutaneous radial forearm flap anastomosed to the facial artery and vein proved ideal for final closure of the surgical wound. It is composed of thin pliable skin perfectly accommodating face contour providing at the same time an adequate color and hairless surface.

Primary Card

Radical parotidectomy and facial reanimation combined offer a viable reconstructive option after radical parotidectomy resulting in acceptable aesthetic and functional outcomes.

The knowledge and application of different reconstructive techniques combined, renders the surgeon a broader spectrum of treatment solutions for the oncologic patient improving overall survival and quality of life after a potentially mutilating surgery.

REFERENCES