

Correction of the Lower Lip with a Cartilage Graft and Lip Resection in Patients with Facioscapulohumeral Muscular Dystrophy

Mio Matsumoto, MD; Satoshi Onoda, MD; Hiroko Uehara, MD; Yuki Miura, MD; Yuko Katayama, MD; Yoshihiro Kimata, MD

Disclosure/Financial Support: None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript.

INTRODUCTION: Facioscapulohumeral muscular dystrophy (FSHD) is a myopathy that involves facial, shoulder, and upper arm muscles. FSHD is a rare disease and there are few reports in the literature describing the correction of the associated facial deformities. Recently, we surgically treated three patients with FSHD who complained of functional and aesthetic issues due to a drooping lower lip caused by facial muscle atrophy and weakness.

MATERIALS AND METHODS:

All procedures were performed under local anesthesia. After resection of the atrophic and drooping central part of the lower lip, approximately 1-2 cm in width, we created an oblong subcutaneous space for grafting the auricular cartilage through the lip resection area and a small horizontal incision under the mental region. To avoid the outline of the grafted cartilage appearing on the skin surface, and to fix the lower part of the cartilage to the mandibular bone, the space was made through the atrophic orbicularis oris muscle, just above the periosteum of the mandible.

RESULTS:

There are some reports describing the correction of the lower lip using an atrophic lip resection¹, free muscle transfer^{2, 3}, muscle transition⁴, lifting by fascia or absorbable suture⁵, or hard tissue grafting. We treated three patients with a novel technique utilizing an auricular cartilage graft to lift the atrophic and drooping lower lip. After the operation, the lower lip was elevated in all patients.

CONCLUSION:

An auricular cartilage graft with lip resection was performed for patients with FSHD who suffered from a drooping lower lip. This method enables the elevation of the lower lip via a short operation that utilizes local anesthesia. After the operation, the patient may achieve better functional and aesthetic outcomes. This procedure may be considered in future cases requiring correction of a drooping lip.

REFERENCES:

1. Kamiishi H, Ohtsuka H, Shioya N. Correction of myopathic face associated with myotonic muscular dystrophy. A case report. J Maxillofac Surg 1977;5:48-54
2. Ueda K, Oba S, Ohtani K, et al. Functional lower lip reconstruction with a forearm flap combined with a free gracilis muscle transfer. J Plast Reconstr Aesthet Surg 2006;59:867-870
3. Ninkovic M, Spanio di Spilimbergo S, Ninkovic M. Lower lip reconstruction: Introduction of a new procedure using a functioning gracilis muscle free flap. Plast Reconstr Surg 2007;119:1472-1480
4. Chan RK, Bojovic B, Talbot SG, et al. Lower lip suspension using bilateral temporalis muscle flaps and fascia lata grafts. Plast Reconstr Surg 2012;129:119-122
5. Cocke WM, Davis WG. Reconstruction in Landouzy-Dejerine progressive muscular dystrophy. Plast Reconstr Surg 1971;48:77-79