

## Is it really a silicone sling assisted temporalis muscle transfer?

Sir,

We read an article by Gupta *et al.*<sup>[1]</sup> with keen interest. We wish to express following comments. Paralytic lagophthalmos remains the most serious complication of facial nerve palsy. Temporalis muscle transfer (TMT) for paralytic lagophthalmos, though a dynamic procedure, remains difficult, challenging and time-consuming surgery despite several modifications.<sup>[2-4]</sup> We appreciate the authors for commendable attempt to manage paralytic lagophthalmos by modified silicone sling assisted TMT.<sup>[1]</sup>

Authors<sup>[1]</sup> mention that the temporalis muscle (TM) is used in dynamic procedures as it is spared in a case of facial palsy that conveys the impression as if TM is innervated by 7<sup>th</sup> nerve. The fact remains that TM is used because it is innervated by 5<sup>th</sup> nerve. Authors<sup>[1]</sup> mention that slings were advanced in the lids between the paralyzed orbicularis oculi and the skin, which in our opinion appears to be superficial. The sling is also visible through the skin. Such a superficial insertion of sling may suffer several disadvantages including extrusion. The silicone sling should have been placed submuscular between orbicularis muscle and the tarsal plate.<sup>[2,3]</sup>

Postoperative day has not been mentioned in the postoperative picture.<sup>[1]</sup> However, it seems to be early postoperative picture as skin sutures are still intact. Authors<sup>[1]</sup> have failed to report long-term follow-up results after 3 months. Even postoperative photographs of the palpebral aperture in the primary position and on mastication in early and at 3 months postoperative are not presented. Moreover, authors<sup>[1]</sup> have failed to document the dynamicity of their procedure. Frey *et al.*<sup>[4]</sup> documented dynamic lid closure following TMT using three-dimensional video analysis system.

In our opinion, the procedure described by Gupta *et al.*<sup>[1]</sup> is hardly any TMT, as the length of muscle shown is quite small, it fails to reach even up to the lateral canthus and is far posterior to the lateral canthus. It appears that TM is mainly acting as muscle stump for just anchoring the silicone rod. Dynamic reanimation of eyelids by TMT has not been achieved using silicone sling. Thus, it does not appear to be a silicone assisted TMT, rather it is more appropriate to call it a TM assisted silicone sling in the eyelid for management of paralytic lagophthalmos. We believe that similar postoperative results can be achieved by passing silicone sling in eyelid as described by Arion.<sup>[5]</sup>

Authors<sup>[1]</sup> did not comment about postoperative patient's training for chewing exercise. We believe that the patient must

be educated about the need to clench the jaw in order to close eyelids voluntarily.<sup>[6]</sup> Practicing this in front of the mirror is helpful to develop a visual think-blink reflex to achieve dynamic lid closure.<sup>[6]</sup>

As the silicone is a synthetic material, its integration with TM or eyelid tissues is unlikely. Moreover, in long-term with contraction of TM, silicone rod may cut through or lose its elasticity and TM may retract to its original position, resulting in recurrence. Thus, permanency of the procedure seems yet another concern.

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