**Introduction:** some patient with lesion in the facial nerve have as a characteristic the absence of face mimic. Diverse surgeries aim at repairing the injuries of the facial nerve by using another cranial nerve to re-innervate the face nerve, such as the *masseteric-facial anastomosis*. The clinical assessment of these patients requires percipient methods that demonstrate which muscles were re-innervated and through which motor command these muscles would return to the face mimic. The myofunctional speech therapy will be based on the results of this perceptual evaluation.

**Purpose:** to perform an evaluation of the face muscles in a patient who underwent a surgical facial nerve reconstruction, referred to as the *masseteric-facial anastomosis*.

**Methods:** we carried through an electromyography surface examination with Miotec® Miotool 400 four channels apparel, in the zygomatic and orbicular muscles of the eyes in a women, 55-year old, post-surgical of *masseteric-facial anastomosis*, six months ago, evolving with peripheral face paralysis to the left. The electrodes were placed on the left zygomatic and orbicular muscles of the left eye, following the longitudinal direction of the muscle fibers. The reference electrode was fixed on the sternocleidomastoid muscle. The tests were: smile without dental support for eight seconds (S1), smile with dental support for eight seconds (S2), eye closure without dental support for eight seconds (O1), eye closure with dental support for eight seconds (O2).

**Results:** the mean electromyographic values obtained on smiling without dental support S1 was 15.0 μV and with dental support S2 increased to 53.4 μV. The mean electromyographic values obtained on eye closure without dental support O1 was 15.3 μV and on eye closure with dental support O2 it increased to 42.3 μV. Clinical assessment recorded through photos, also demonstrated the return of facial mimic when the motor command of the muscles was prompted through the dental support.

**Conclusion:** surface electromiographic evaluation was a key factor for demonstrating the re-innervations of the face mimic through the motor command of the *masseteric-facial* nerve and for determining the miofunctional rehabilitation from the motor control of the masseteric branch inserted in the facial nerve.