INTRODUCTION:

External periorbital wrinkles are one of the most evident facial signs of aging, formed by the fibers constant contraction of the eyelid orbicularis muscle orbital part.

During the facial expression movements, the muscular fibers exert on the skin a “bellows” action of enlarging during expansion and shortening during contraction.

If we add to the skin aging the solar elastosis, we would show permanent wrinkles and folds on the external periorbital zone of the skin.

There exist several techniques:

- resecting skin and orbicular muscle by blepharoplasty;
- making an orbicular muscle flat during liftings;
- separating the orbicular muscle from the skin, for a temporary improvement;
- removing the orbicular muscle during blepharoplasty;
- using botulinum toxin to treat these wrinkles;
- myotomy of the orbicular muscle using endoscopy;
- myoplasty of the orbicular muscle during liftings.
- resecting the orbicular muscle during blepharoplasty

METHOD

For the last two years, we performed 102 facial liftings to patients showing different stages of aging. See Chart 1.

As a complementary procedure to eliminate the external periorbital wrinkles, we realized
on those same patients an open field electromyolysis on the fibers of the external orbital portion of the eyelid orbital muscle.

In those cases where the wrinkles and grooves were deeper, the skin in the periorbital area was further treated with CO$_2$ laser plus Erbium.

The results were clinically evaluated and patient’s pictures, both pre and post, were compared in contracting and relaxing.

**TECHNIQUE**

The introduction into the eyelid orbital muscle is realized through the temporal and preauricular incision from the facial lifting; raising the cutaneous flat and keeping untouched the temporo facial parietal.

The flap recession goes on by scissors, from its side to the middle, and close to the muscle the surgeon uses his fingers in a rotative and forward motion, to loosen the orbicular eyelid muscle, which remain tightly fastened to the deep face of the cutaneous flap.

Once the muscle is exposed, it is held on the left hand index finger to improve inspection and direct control of the treatment depth.

The procedure is realized using a cold-tip radio-frequency scalpel from distal to proximal regions, thus eliminating thoroughly the exposed portion of the muscle.

Afterwards the total **absence of the muscle**, plus a higher relaxing on the cutaneous flap, allows for a stronger traction and rise on our ritidioplasty, thus requiring a higher suspension of the **muscle remanent**.
CONCLUSIONS

On every patient performed, this technique achieved the complete removal of all external periorbital wrinkles and folds on that region, as well as an additional cutaneous relax of about 1 cm, which improved and helped the traction of the flap.

Complications were just two cases: one suffering haematoma on the 8th. post day solved by conservative treatment, and a second one on a patient with paresthesia (tingling), shooting or burning pains, or hyperesthesia affecting the frontal muscle, which we believed a consequence of the dissection.

We consider the electromyolysis of the eyelid orbicular muscle for external periorbital wrinkles as being an excellent facial lifting complementary procedure to achieve the complete eradication of all wrinkles and folds in the external periorbital face area.

As a clinical plus, we obtain additional cutaneous relaxing and low index of morbility.
Case 1: Pre operatory

Case 1: Post operatory after 6 months

Case 2: Pre operatory

Case 2: Post operatory after 3 months

Case 3: Pre operatory

Case 3: Post operatory after 4 months
REFERENCES


