



Correction programs for the perioral zone: how to reduce the risk of complications and get an effect. Pilot study.

Introductory:

The changes in a perioral region are caused by various factors: hereditary predisposition, anatomical features, facial muscle tone and activity, facial skull structure and dentoalveolar system, and do not directly depend on the age of the patient. In the skin there are processes of chronic inflammation (inflammaging), changes of microcirculation, disorganization of collagen and elastin fibers, decrease of the amount of hyaluronic acid. Correcting this area, sometimes we have complications such as contouring of the filler at the site of injections, tissue ischemia, insufficient density and elasticity of tissues at the site of planned manipulations, and the absence of the expected effect. Correction of the perioral area should be aimed to minimizing side effects and improving the structure and quality of the skin.

We use a preparation containing high molecular hyaluronic acid (22 mg/ml) and succinic acid (16 mg/ml).

High molecular hyaluronic acid:

- Reduces the level of proinflammatory cytokines.
- Reduced leucocyte infiltration and tissue edema.
- Removes dehydration of the skin.
- Provides mechanical support of tissues.

Succinic acid:

- Normalizes microcirculation,
- Normalizes cellular energy exchanges.
- Has antioxidant properties.
- Prevents damage of the cell genome and.

Materials & Methods:

Correction of the perioral area was carried out for patients with age-related changes of 2-3 degrees according to the Glogau scale and the degree of nasolabial folds expression from minor to expressed in the WSRS scale.

For correction we used preparation, contained high molecular hyaluronic acid (22 mg/ml) and succinic acid (16 mg/ml) (Xela Rederm 2.2%) in dose 2 ml (technique of linear injections, using a 30G needles).

The recommended course included from 2 to 4 procedures (1 every 2 weeks) depending on the degree of expression of age-related changes.

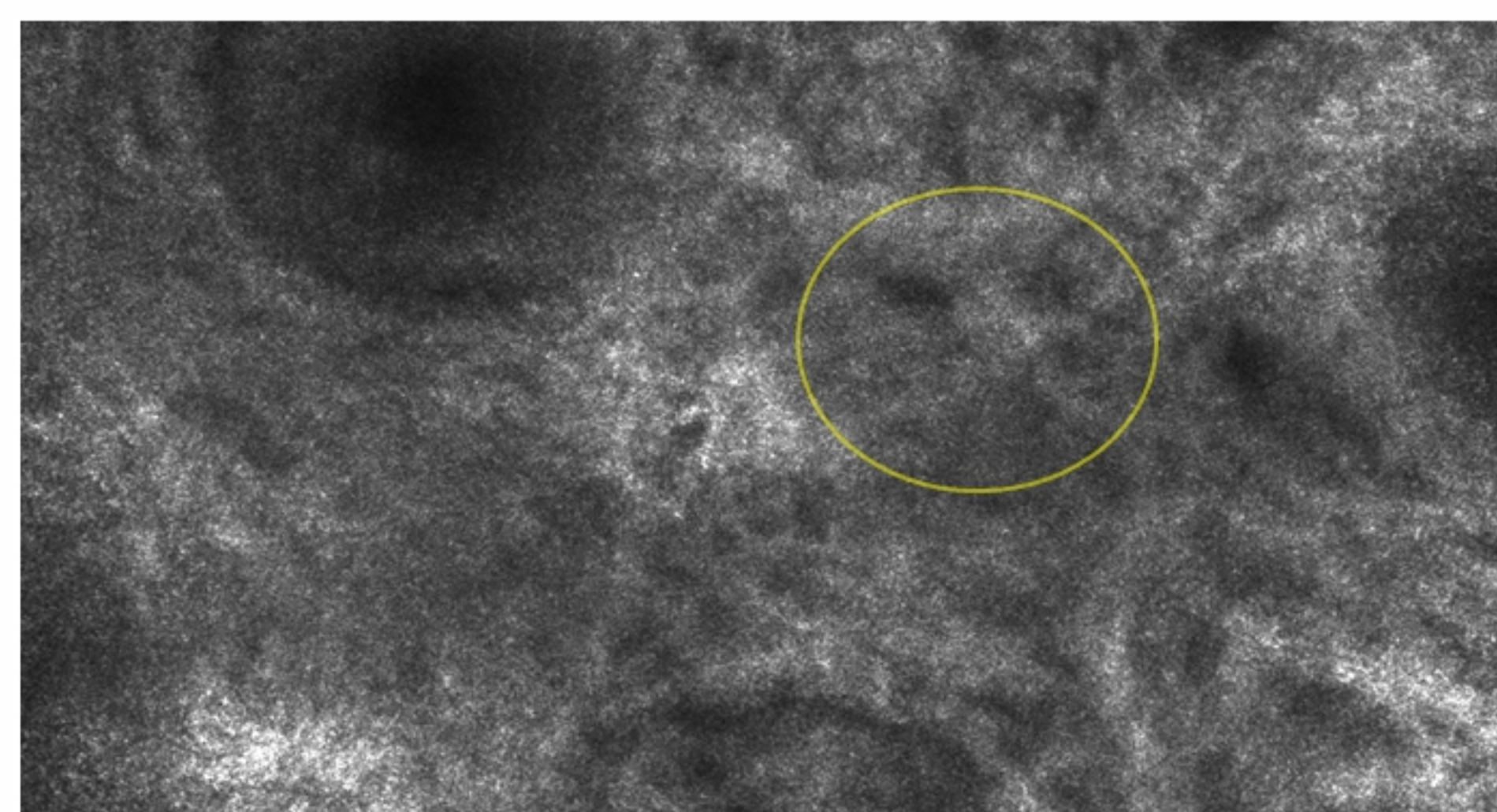
The evaluation of the results of the procedure was carried out on the basis of changes in the Wrinkle Severity Rating Scale (WSRS), the International Global Aesthetic Improvement Scale (GAIS), by the in vivo confocal laser scanning microscopy at the beginning of the course and 30 days after the end of the course, also we have compared the photos before and after of the course, on the 30th and 60th day after the end of the course. For the purpose of anesthesia we used Emla.

Results:

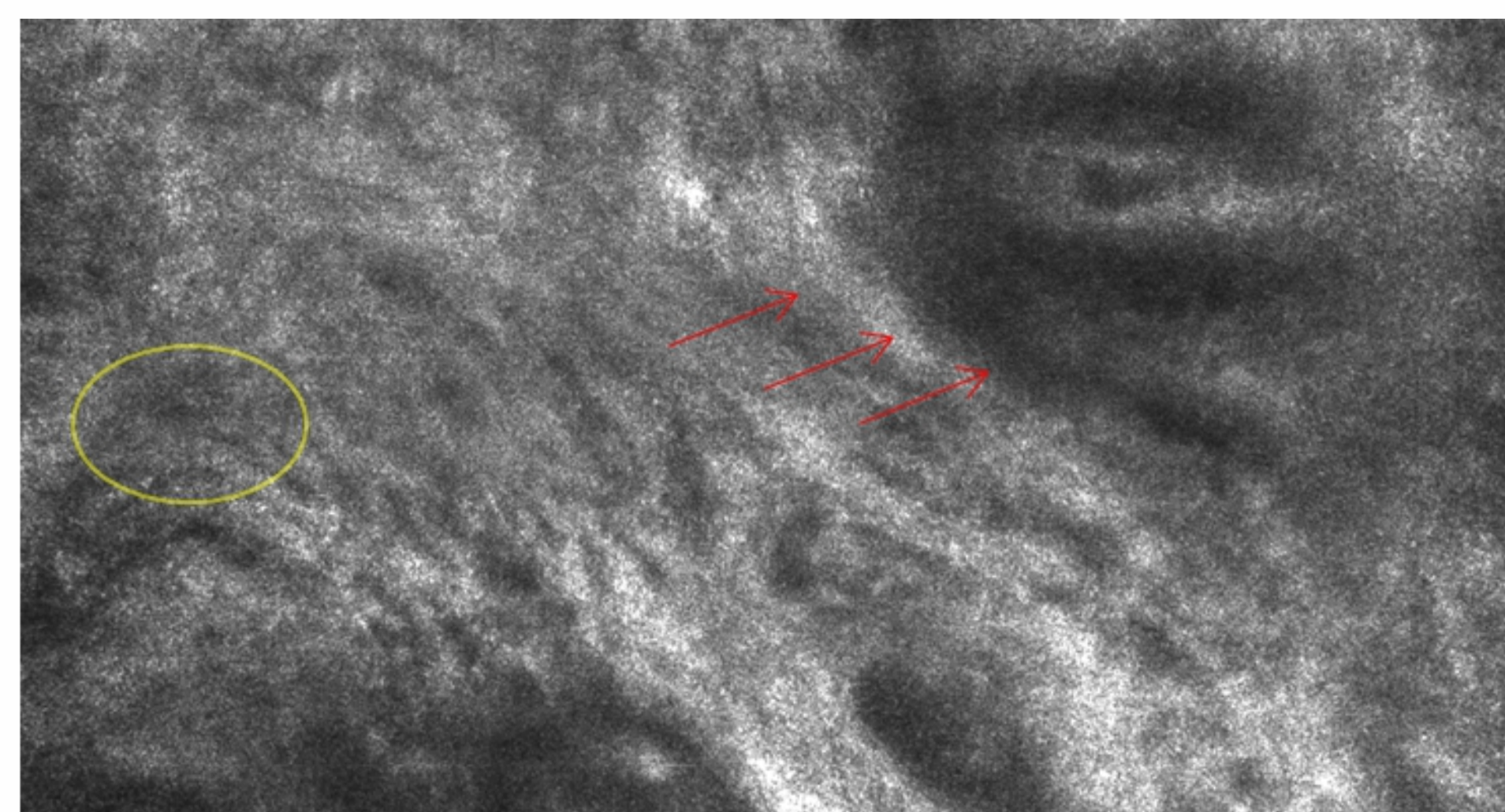
On the 30th day from the beginning of the course the improvement of the WSRS indicators was observed. There were the improvement of skin turgor and elasticity, densification of the skin, reduction some wrinkles, improvement of the contour and structure of the red border of the lips on the 30th and 60th days after the end of the course.

Confocal scanning laser microscopy noted the improvement in the derma, a decrease in the relative density of fiber disorganization, an increase in the total number of connective tissue fibers, and a more regular arrangement.

Confocal scanning laser microscopy



Before the course.



After the course.

There are an improvement in the derma, decrease of disorganization sites (shown in the yellow circle) (dark areas), an increase in the total number of connective tissue fibers, and their more regular arrangement (red arrows) after the course.

Conclusions:

The protocol of use the preparation, contained hyaluronic acid (22 mg/ml) and succinic acid (16 mg/ml) can be effectively used for correction for correction of the perioral zone in patients with age changes of 2-3 degrees on the Glogau scale as monoprocedure or in combined protocols of correction.