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## FRACTIONAL LASER SKIN REJUVENATION IN COMBINATION WITH REDERMALIZATION.

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Background: Fractional laser resurfacing provides clinically apparent correction of involutional changes of the skin. Our research proves the effectiveness of combined use of Er: Yag laser and redermalization: intradermal administration of a combined drug, which improves the properties of the skin in the area of laser exposure, blocks the development of inflammatory complications, reduces edematous syndrome.

Methods: 2 groups of women (37-55 years) with signs of skin aging. Group 1: Session 1: Xela rederm 1.1% 2 ml - combined drug of unstabilized high-molecular hyaluronic acid (11 mg/ml) and sodium succinate (16 mg/ml). Session 2: in 2 weeks Laser systems Er:Yag 2940 nm, 12-14 J/cm2, single pass. Session 3: Xela rederm 1.1% 2 ml. Group 2: Session 1: Laser systems Er:Yag 2940 nm, 12-14 J/cm2, single pass.

**Results:** Evaluation of the result clinically and by non-invasive methods of morphofunctional skin diagnostics on the apparatus Aramo SG (Korea) according to the following criteria: moisture, elasticity, pigmentation, wrinkle depth after 6 weeks from the first session.

Group 1: skin elasticity increased by 20.87% (Fig.1), derma hydration increased by 43.45% (Fig.2), wrinkles depth decreased by 38.73% (Fig.3) and pigmentation - by 52.10% (Fig.4).

Group 2: increasing skin elasticity by 7.43 % (Fig.1), reducing skin hydration by 7.17% (Fig.2), reducing the depth of wrinkles by 17.66% (Fig. 5) and pigmentation - by 39.25% (Fig. 6).

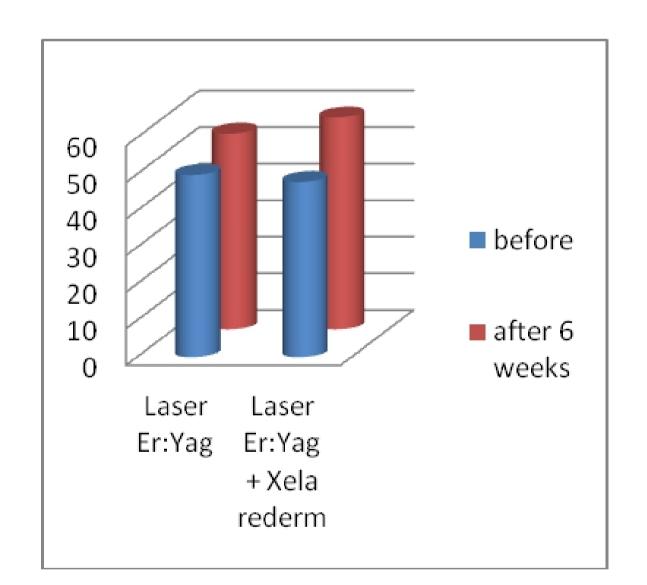


Fig.1. Skin elasticity

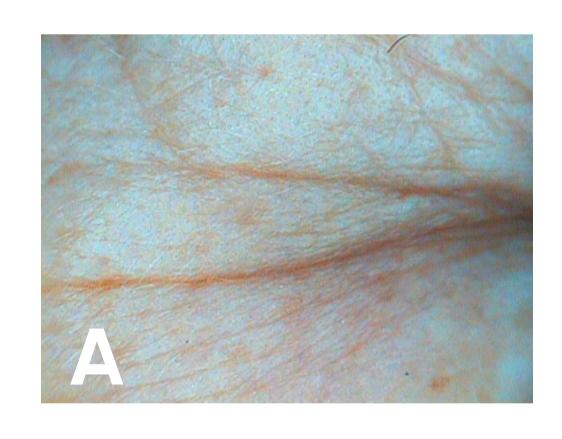


Fig. 3. Depth of wrinkles in the periorbital area (has withdrawn. 100):

A - initial state; C - with 6 weeks.

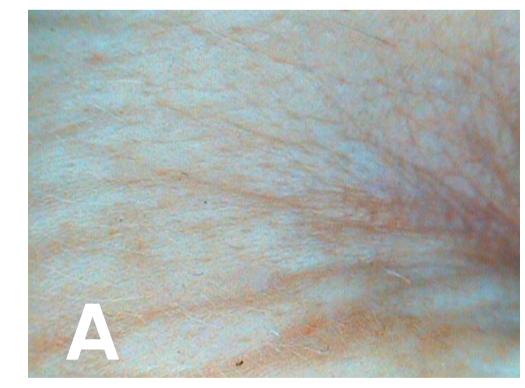


Fig. 5 Depth of wrinkles in the periorbital area (has withdrawn, 100):

A - initial state; C - with 6 weeks.

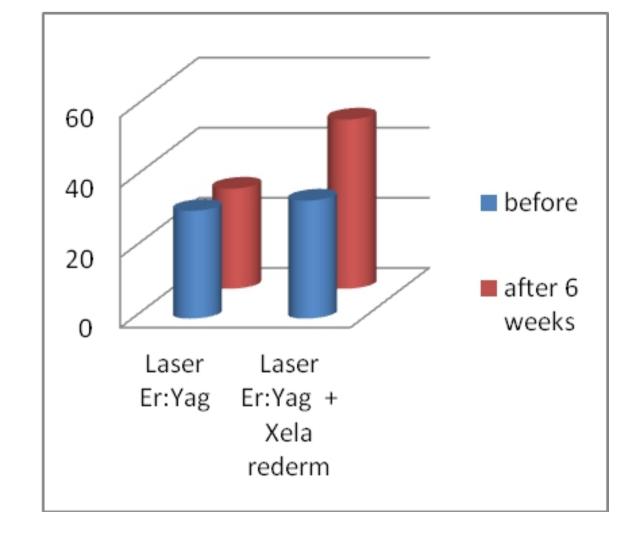


Fig.2. Derma hydration

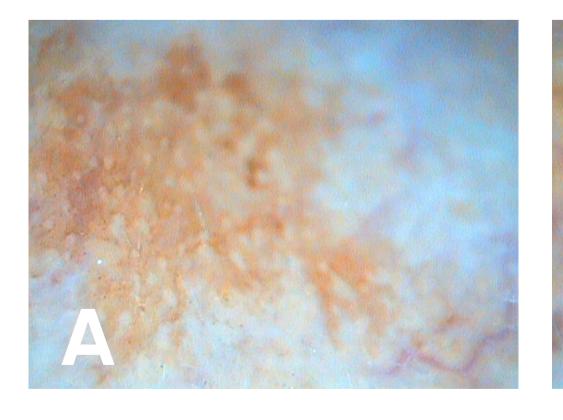


Fig. 4 Pigmentation (has withdrawn. 100): A - initial state: C - with 6 weeks.

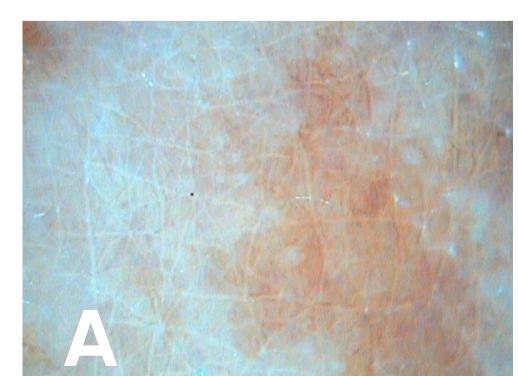


Fig. 6 Pigmentation (has withdrawn. 100): A - initial state; C - with 6 weeks.

CONCLUSIONS

The use of redermalization procedure allows increasing of the effciency of laser rejuvenation. The complex of unstabilized high-molecular weight hyaluronic acid and sodium succinate enhances the processes of reparative regeneration of the skin due to anti-inflammatory, antioxidant and antihypoxic effects, restoring the energy potential of skin cells.