

PERIORBITAL DARK CIRCLES

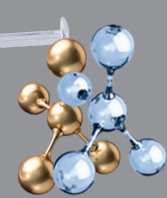
are defined as bilateral, round, homogeneous dark macules on the infraorbital regions.*

CAUSES:

1. Pathological vascularization
2. Dermal hyperpigmentation
3. Special anatomy

REDERMALIZATION

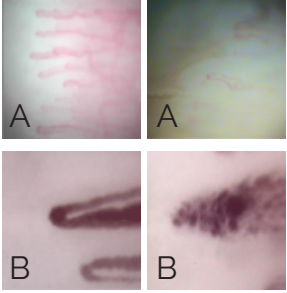

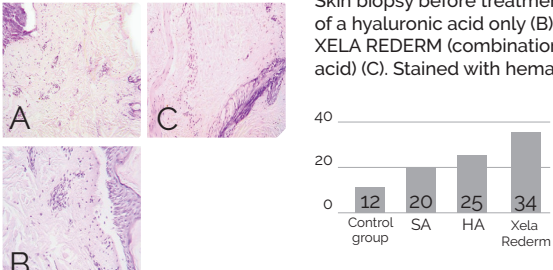
High molecular weight hyaluronic acid and succinic acid



SOLUTION:

REDERMALIZATION

proven improvement of the skin quality by increasing its regenerative potential

PROBLEM	REDERMALIZATION AS A SOLUTION	MECHANISM OF ACTION										
PATHOLOGICAL VASCULARIZATION <ul style="list-style-type: none"> • Static - Excessive or superficial subcutaneous vasculature (A) • Atonic -Periorbital edema (B) 	Mechanical activation of regenerative skin function, intensification and restoration of microcirculation	 <p>Microvascular spasm causes hypoxia that results in lack of oxygen, water, nutrients. Consequentially, wrinkles, dry, thin skin develop. Weak microcirculation within vessels means that blood enters the tissue, but tends to pool there. With blood vessels flooded, toxins may build up. Dark circles and swelling appear thanks to liquid accumulation under the skin. Succinic acid accelerates reparation and growth of new vessels.</p>										
DERMAL HYPERPIGMENTATION	Succinic acid (SA) mechanically blocks tyrosinase enzyme that triggers melanin	 <p>SA mechanically blocks melanin production</p>										
SPECIAL ANATOMY <ul style="list-style-type: none"> • Lack of volume and expression of tear through • Shadows caused by pseudoherniated orbital fat • Thin skin 	Dermal recovery, increase skin thickness, intensification and restoration of microcirculation	 <p>Skin biopsy before treatment (A), after a course of injections of a hyaluronic acid only (B) and after a course of injections of XELA REDERM (combination of succinic acid and hyaluronic acid) (C). Stained with hematoxylin-eosin. UV-200</p> <table border="1"> <caption>Skin Thickness Measurements (µm)</caption> <thead> <tr> <th>Group</th> <th>Thickness (µm)</th> </tr> </thead> <tbody> <tr> <td>Control group</td> <td>12</td> </tr> <tr> <td>SA</td> <td>20</td> </tr> <tr> <td>HA</td> <td>25</td> </tr> <tr> <td>Xela Rederm</td> <td>34</td> </tr> </tbody> </table>	Group	Thickness (µm)	Control group	12	SA	20	HA	25	Xela Rederm	34
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*Freitag, Fernanda Magagnin, and Tania Ferreira Cestari. "What causes dark circles under the eyes?" Journal of cosmetic dermatology 6.3 (2007): 211-215.

REDERMALIZATION

Treatment course for skin quality improvement with XELA REDERM.



HYALURONIC ACID

is a natural material that is contained in neuronal, connective and epithelial tissues

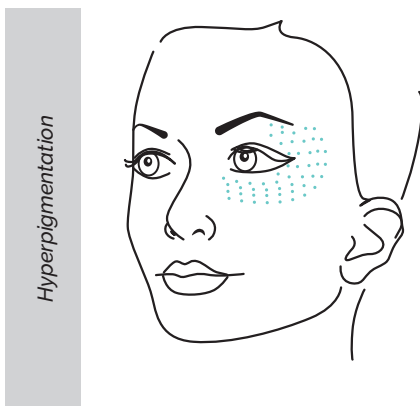
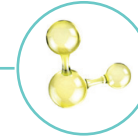
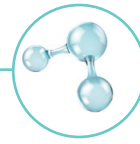
- It helps to activate anti-inflammatory mediators
- Restores and maintains water balance
- Contributes to the synthesis of basic structural proteins
- Provides mechanical support for tissues

Preparations based on high molecular weight hyaluronic acid are used for the Redermalization procedure. Due to its properties, it provides a much longer lasting effect on improving skin quality

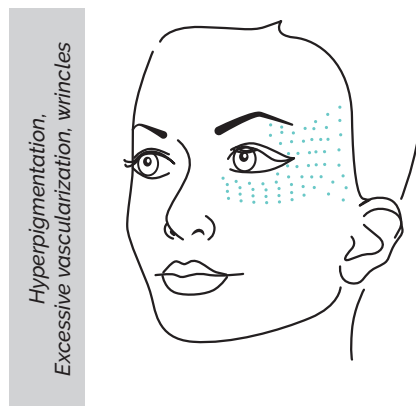
SUCCINIC ACID

- (succinate) is a natural component, which is found in all cells in the body
- Contributes to the normalization of microcirculation and activation of lymphatic drainage
 - Regulates cellular energy exchange
 - Has antioxidant properties
 - Prevents damage of the cell membrane
 - Contributes to the stimulation of the synthesis of basic structural proteins

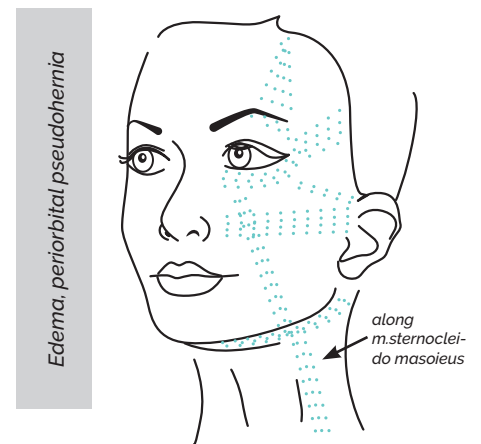
Succinic acid has been found an important component which has provided a breakthrough in improving skin



Hyperpigmentation



Hyperpigmentation, Excessive vascularization, wrinkles

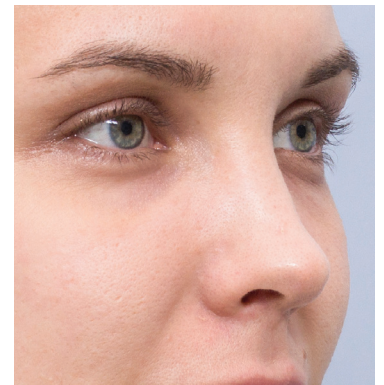


Edema, periorbital pseudohermia

along m.sternocleidomastoideus

Product: XELA REDERM 1.1% 1-2 ml. Intradermal injections with the papular technique. Diameter of the papula = 1-2 mm, the distance between papules 2-3 mm. Amount of product 1-2 ml.

The course: 3 procedures with the interval 2 weeks



Polina, 28 years old

Indications: dark circles under the eyes

Procedure & products used: Three treatments with XELA REDERM 1.1%, 1 ml

Redermalization 10 days apart

**Results may vary. Unretouched photos were taken before and after the course of procedures*