Treatment Modalities
Indications, Client Selection And Skin Care Selection
WHAT ARE SOME OF OUR TOOLS?

- NEEDLING: MEDICAL COSMETIC
- MICRODERMABRASION
- DERMPLANING
- LASERS
- IPL
- CHEMICAL PEELS
- MICROCURRENT
- LED

All modalities and claims may not conform to your state or federal regulations. Please check with your local boards.
Needling

Medical Needling

Cosmetic Needling

Medical Needling
Percutaneous Collagen Induction (PCI) - the instruments

*Disclaimer: There is currently no approved medical or surgical needling device approved for sale in the USA. Environ's cosmetic rollers are approved for sale in the USA.
Recovery after needling / Epidermis remains intact between punctures

<table>
<thead>
<tr>
<th>Intraoperativ</th>
<th>Wenige Minuten post</th>
<th>Wenige Tage post</th>
<th>Wochen bis Monate post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Diagram showing the stages of recovery after needling:

- **A**: Initial injury
- **B**: Immediate response
- **C**: Healing process
- **D**: Full recovery
All skin types and all regions, with the exception of:

- Potentially inadequate pre-treatment with vitamins
- Acute infections
- Skin cancer
- Unreasonable expectations
SKIN PREPARATION

• Start skin preparation a minimum of 3 weeks prior to treatment
• Cleanse and tone according to skin type
• Vitamins A and C are essential
Treatment In Clinic

Protocol provided by Environ Skin Care

• Designed, tested and used by Dr Des Fernandes and Dr Matthias Aust
TREATMENT IN CLINIC

• Skin preparation should include cleansing with an anti-septic cleanser and toning with alcohol prior to anesthetic application
• Application of appropriate topical anesthetic
• Occlude topical anesthetic for a minimum of 30 minutes
• Remove the anesthetic from the skin surface one section at a time with sterile gauze
• Needle the selected area and work on each area for as long as the patient finds comfortable. Then move to an adjacent area. It should take about 30-40 minutes to needle the whole face properly.
• Allow blood to dry and oozing to stop
• Spritz the skin with sterile water once blood has dried and wipe off all the blood with sterile gauze soaked in sterile water
• Wash the skin with antiseptic wash with tea tree and salicylic acid, remove with sterile gauze
• Apply a thin layer of a 2.5% TCA cream peel for **four minutes only**
• Remove with clean water
• Wash the skin with antiseptic wash with tea tree and salicylic acid, remove with sterile gauze
• Apply treatment product that may include peptides or vitamins in a thin layer to the whole needled area and allow to dry.
• Once the treatment serum has soaked into the skin, option to apply an Alginate Mask and leave on the skin for 20 minutes.
• Finish with either: a. the Vitamin and antioxidant creams that have been used prior to needling, or b. Vitamin A, C & E Oil and sunscreen
POST TREATMENT

• Cleanser and toner for skin type
• Peptide product to promote collagen production
• Moisturizer to soothe, protect and complement barrier function
Microneedling: Matching the results of medical needling and repetitive treatments to maximize potential for skin regeneration

S. Zeitter a,*, Z. Sikora a, S. Jahn a, F. Stahl b, S. Strauß a, A. Lazaridis a, K. Reimers a, P.M. Vogt a, M.C. Aust a

a Department of Plastic, Hand and Reconstructive Surgery, Hannover Medical School, Hannover, Germany
b Institute for Technical Chemistry, Leibniz University, Hannover, Germany

ARTICLE INFO

Article history:
Accepted 11 December 2013

Keywords:
Medical needling

ABSTRACT

The benefits and risks of singular and repetitive microneedling (1 mm) have not been thoroughly investigated. The aim of this study was to evaluate the benefits and risks of singular and repetitive skin needling with a microneedling device in an animal model with and without skincare. 30 Sprague Dawley rats were randomized to five groups: control, skincare only (Vitamin A & C), 1× needling 1 mm, 4× needling 1 mm, 4× needling 1 mm with skincare, and 4× needling 1 mm without skincare. Histological and immunohistochemical analysis showed improved skin thickness, collagen and fibronectin expression. No safety concerns were observed in skincare groups. Microneedling resulted in deeper penetration, more collagen and fibronectin expression, and less fibrosis. The combination of skin needling and skincare is strongly recommended for maximal skin regeneration.
COSMETIC NEEDLING
Cosmetic Needling VS Medical Needling

< .5mm

>.5mm
the principle

Micro-channels are created on the surface of the skin via a process that we refer to as cosmetic needling, which dramatically increases the effectiveness of topically applied products.

This treatment is not painful and does not damage the skin.
SKIN PREPARATION

- Introduce cosmetic needling slowly to evening regimen
- Ensure the product applied post is free of fragrances and unwanted ingredients
- Choose vitamin, peptide, antioxidant and growth factor enriched serums and creams
All skin types and all regions, with the exception of:

- Severe solar keratosis
- Eczema
- Psoriasis
- Raised moles
- Warts
- Skin cancer
- Problematic skin
Dermaplaning

• A scalpel is used to precisely exfoliate superficial keratinized cells and remove vellus hair

• This treatment requires skill and should be done with extreme caution under the direction of a medical professional
Indications

• Precise exfoliation of dead skin cells
• Removes vellus hair
• May reduce superficial pigmentation
• Loosens congested pores
• Smooths skin texture
• Allows other products to be more effective
Contraindications

• Use of blood thinning medications
• Diabetes
• Unusual tendency to scar
• Open wounds or lesions
• Hemophilia
• Use of Isotretinoin
• Grades III and IV acne
• Papulopustular rosacea
LASERS AND IPL
Visible Light And Near-Infrared Lasers

Visible Light Lasers

- **Argon**: blue-green (488nm); melanin, blood
- **KTP**: green (532nm); melanin, blood
- **Pulsed Dye**: yellow (585nm); blood
- **Ruby**: deep red (694nm); melanin

Near-infrared Lasers

- **Alexandrite**: near infrared (755nm); melanin, blood
- **Diode**: near infrared (810nm); melanin, blood
- **Nd:YAG**: near infrared (1064nm); melanin, blood, water
Difference Between Lasers & IPL

**LASER**
- Monochromatic
- Coherent
- Collimated (non-divergent)

**IPL**
- Broad Spectrum
- Non-coherent
- Non-collimated (divergent)
POST TREATMENT

Non ablative, including IPL;
Regular recommended regimen according to skin type that should include gentle cleanser, Vitamin A and C cream + peptide moisturizer OR Vitamin A, C, E nourishing jojoba oil

Ablative or fractional;
Gentle cream cleansing lotion
Peptide serum + Vitamin A, C, and E gel + Peptide moisturizer + Barrier repair moisturizer OR Peptide serum + Vitamin A, C, E nourishing jojoba oil
HISTORY OF PEELING

• Dates back to the ancient Egyptians
• Recipe used was fruit acids combined with skin irritants
• Rather deep peel – the clients hid from society for 2 – 3 weeks and expected a youthful appearance
• Modern peeling started about 100 years ago
TYPES OF PEELS

- TCA
- Alpha hydroxy
- Beta Hydroxy
- Baker’s-Gordon
- Jessner’s
- Modified Jessner’s
Importance Of pH VS Percentage

% = CONCENTRATION
pH = STRENGTH

50%  15 actives
50%  500 actives
INDICATIONS FOR CHEMICAL PEELS
Indications

Assists with the appearance of;

• Superficial uneven skin tone
• Lines and wrinkles
• Uneven texture
• Blemishes
• Lax skin
Contraindications

- Pregnancy or nursing
- Use of Isotretinoin within 3-6 months
- Prone to cold sores
- Poor wound healing
- Autoimmune diseases
- Unusual tendency to scar
- Allergies to aspirin for Salicylic and Jessner’s
POST TREATMENT

• Pre-cleanser and gentle micro-exfoliation to ease sloughing process
• Cleanser and toner for skin type
• Peptide, Vitamin A and C product to promote healing and result
• Moisturizer to soothe, protect and complement barrier function
MICROCURRENT
WHAT IS MICROCURRENT

- Microcurrent is a low level of electricity that mirrors the body's own natural electrical currents, triggering chemical reactions at a cellular level to enhance the production of natural collagen and elastin, provide circulatory benefits, and re-educate the muscles of the face.
INDICATIONS FOR MICROCURRENT
• In 1980, Thomas W. Wing. D.C., N.D., LAc., a fifth generation Chinese Doctor is credited with introducing a microcurrent instrument which was found to be beneficial in the treatment of muscles.

• Originally approved by the FDA as a muscle stimulator, it also found new life in the Cosmetology industry for cellular rejuvenation, facial toning and wrinkle reduction.

• Microcurrent techniques have been proven successful in treating a variety of medical conditions including Bell's Palsy. Bell's Palsy is facial paralysis and usually effects one side of the face only.
Contraindications

- Cardiac pacemakers
- Epilepsy
- Metal implants
- Skin irritation
- Pregnancy
WHAT IS LED

Scientific studies have shown:

• Color Light Therapy uses clinically proven wavelengths of UV-free LED lights that address multiple skin concerns
• Modifies cell activity using light sources without thermal effect.
Red LED Light,
- Rejuvenates, stimulates collagen production, prompts cellular repair
- Increases circulation promoting a more vibrant and youthful complexion.

Blue LED Light
- Proven to have powerful anti-bacterial properties that have the ability to kill the acne causing bacteria, P. acnes.
- Helps to purify the skin, stabilize oil glands, and soothe inflammation.

Yellow LED Light
- Reduces the appearance of redness, swelling, and inflammation
- Beneficial for Rosacea and treating sunburns
- Stimulates the production of red blood cells in the skin and is effective in treating abnormal pigmentation (hypo and hyper), improving lymphatic function, and stimulating circulation.
Green LED Light
• Calming effect
• It helps to lighten hyper-pigmentation spots
• Anti-inflammatory properties, sagging skin around the eyes, under eye circles, hyperpigmentation and sun spots

Purple LED Light
• Increases cell regeneration.

Orange LED Light
• Helps to revitalize the skin
• Brings vitality to dull and lifeless complexions
• Orange light is good for bringing a glow to the skin for special occasions.
THANK YOU

a beautiful skin for a **LIFETIME**

Candace Noonan  
Director Of Education  
candace@dermaconcepts.com