



## Microneedling Dermaroller Treatment

Microneedling is a safe, minimally invasive, handheld, non-surgical, procedure which can be used for treating a various skin condition. It can be also called as collagen induction therapy. This process involves the use of a microneedling device to create a controlled skin injury. It is also used in transdermal drug delivery.

Used to treat various skin conditions like:-

- Acne Scars
- Open Pores
- Fine lines, wrinkles
- Antiageing
- Dull & uneven skin
- Stretch marks
- Under eye rejuvenation
- Facial rejuvenation.
- Pigmentation
- Hair loss.

## How does it look?

Dermaroller is a small device, which has multiple needles. These a medical grade needles having a depth ranging from 0.25 mm to 2.5mm. Different size of needles can be used depending upon skin indications we are treating. For Homecare, 0.25 mm to 0.5 mm roller

can be used. It helps to exfoliate upper layer of skin & this helps in skin rejuvenation. The patient does not get much bruising after treatment & no downtime. In a clinic, 1.5mm to 2.5mm rollers can be used to treat acne scars, wrinkles under the supervision of your dermatologist as it involves mild bruising, redness after the procedure. Sometimes punctate micro bleeding may occur on the skin which gets stopped in few seconds. How does it work?

- During Dermaroller procedure, microneedles are rolled on the surface of the skin, mainly epidermis.
- This creates micro injuries on the skin & opens microchannels on the surface of the skin. These controlled injuries send triggers to our body to stimulate new collagen to fill these micro wounds.
- In this process, micro-injuries at the surface of the skin stimulates the healing cascade & release cytokines.
- These cytokines, through the basement membrane, go to the dermal level of the skin.
- At dermis, it stimulates fibroblasts, stimulates elastin fibers, new collagen & form new capillaries.
- This neovascularisation and neocollagenesis following treatment leads to a reduction of scars and skin rejuvenation, i.e. improved skin texture, firmness, and hydration.

### **How is it performed?**

- Patients face is asked to wash his face with water.
- Topical anesthesia & Numbness cream is applied for 45 min to 50 min.
- Procedure area is cleaned with acetone & betadine.
- Stretch the treatment area, in order to move Dermaroller on the surface of the skin.
- Dermaroller is moved on the surface of the skin in vertical & horizontal directions multiple times. Mild erythema & pinpoint bleed is the endpoint.
- After this, various skin lightening agents, growth factors, PRP, with serums, HA can be applied to the surface of the treated skin as per the indication we are treating. This allows easy penetration of these agents to the dermal level of skin through the microchannels.

### ***Post care :***

- A patient is advised to use a mild gentle cleanser next day of the procedure.
- A moisturizer, to allow easy exfoliation of the skin.
- A broad spectrum sunscreen to avoid PIH after treatment.

### **How many sessions will I need?**

Depending on the type of skin & indication we are treating it takes multiple sessions to show results.

### **Advantages:**

- Easy to perform, minimally invasive, cost-effective, office hour procedure which doesn't involve much downtime.
- Can be used to treat multiple skin indications.

- Can be used as a transepidermal drug delivery procedure to infuse various skin lightening agents, growth factors, PRP, HA to get more enhanced results.
- Can be used as a mode of physical exfoliation.
- Can be advised with other laser resurfacing procedures to get best results.
- Can be done once in a month for 4 to 5 sessions followed by maintenance to get desired results.
- Other treatments such as subcision (a surgical procedure using a needle to cut fibrous bands between dermis & subcutaneous tissue) and punch elevation can be done to get optimal results in acne scarring.

**Disadvantages:**

Will not be effective as standalone treatment in severe grades of acne scars, burn scars, surgical scar.