Skin Needling: Hurting or Helping?

by Annet King

At The International Dermal Institute, we feel honored that many skin therapists seek out our position on the latest treatments, technology and ingredients – whether they be controversial or heralded as the next “miracle in a tube!” Skin needling is one of those hot topics that we have received many questions about from therapists worldwide.

So What Is Skin Needling?

Skin needling goes by various names in the skin and medical community, including Dermarolling, Percutaneous Collagen Induction (PCI), Collagen Induction Therapy, Dry Tattooing and Intradermabrasion. Pioneered by Dr. Andre Camirand in the late 1990s as an evolutionary step from scar Subcision®, it simply involves the use of manually applied skin rollers that have around 200 fine surgical steel needles attached to the roller mechanism. It’s applied directly to the skin in a crisscross motion. The objective is to stimulate or puncture the skin to stimulate collagen and elastin production, smooth skin and promote scar or stretch mark reduction through the skin’s natural wound healing process. For the medical grade level application of skin needling, the target of the needles and penetration is the upper dermis called the intermediate reticular dermis.

Effects on the Skin: Medical vs. Skin Care

Most of the claims about wrinkle reduction and new collagen growth come from the manufacturers of the rollers or those members of the medical community who are associated (remunerated) by those companies. What’s important to keep in mind is that in most cases, patients in the study also used a topical Retinoic Acid or Retinol based product in conjunction with the skin needling. However some independent dermatologists do claim to see positive scar reduction outcomes in their patients, and another upside is that it does offer a cost effective alternative to fractional laser resurfacing. In general, skin needling is a long term commitment of 1–2 years of combined in office and at-home treatment.

The effects of skin needling differ according to needle gauge, length and the manual pressure that’s used with the roller. Therefore the level of skin invasion and subsequent inflammation on the skin can vary from gentle stimulation to piercing the skin and drawing fluids, i.e., blood and lymph. With the variances of effects skin-needling rollers can have, most devices are disposed of in the appropriate biohazard container or are properly sanitized and given directly to the same client for at home use. Whichever method is observed, it is important that correct sanitation measures are followed to prevent the chance of cross contamination from occurring. As with many methods, it’s vital to respect the boundaries of medical, professional, and at-home tools, and skin benefits shouldn’t be confused. Dermabrasion, microdermabrasion, and crystal-containing scrubs come to mind! The marketing hype can baffle the end user and incense the professional!
Different Needles, Different Outcomes

A roller with wide-gauge, short needles that are under 0.25 mm in length is generally non-invasive and cannot cause trauma to the skin, but rather it stimulates and provides gentle exfoliation while increasing superficial circulation. This action, much like manual massage and other electrical modalities, may enhance the penetration and absorption of active ingredients into the deeper layers of the skin. Therefore, additional age-fighting skin benefits can be achieved when skin needling is combined with products that contain collagen-boosting and skin-fortifying ingredients like Retinol, Vitamin C and Peptides.

The longer, thinner needles around 1.0 mm or 1.5 mm in length are more hazardous; the potential for breaking the skin, drawing fluids, causing injury and subsequent risk of infection is much higher. Extreme caution must be used as this is considered highly-invasive and high-risk. It may also be beyond a skin therapist’s legal scope of practice. Therefore, this procedure is best conducted under medical supervision as adverse reactions and post-procedure complications can occur. When the barrier of the skin is compromised to this degree, bacterial skin infections, adverse skin reactions, post-inflammatory hyperpigmentation and premature aging (due to inflammatory mediators being drawn to the area) can result. Products that are calming and anti-inflammatory would be ideal to soothe any inflammation post-needling. For pre-care, the most important aspect is that the skin is thoroughly clean to prevent any possibly risk of infection.

As professional skin therapists, we have a limitless choice of tools in our arsenal, but it’s critical that we understand how to use those tools safely, correctly and appropriately. Understanding the boundaries and risks involved is also part of the job. Your reputation and success are in your own hands; so when you reach for that acid or questionable tool, ensure that you have evaluated all the outcomes, both good and bad.