# Would you like to know what a skin micro needling pen does?

**INNOPen** 



Hello, again we wish to thank you for your support, on week 251 we are sharing information about resurfacing with Derma pen procedures, a way of resurfacing our skin with a small amount of invasion and remarkable results. I have seen the results on myself and many other clients and all are just amazing. There are a few companies that sell and provide procedures with the derma pens, not all good, it is very important to have the procedures done by a Dr. There are many side effects that can happen when done by a nonqualified

professional and with a certified Derma pen. On the internet there are many derma pens on the market, I personally wouldn't touch them due to wrong metals, needle alignment etc so here we go, lets take a look at our research and why you the reader must check the pros and cons before there is a serious consequence that can be avoided, here we will take you to the research we did on one Derma pen that we like. The reason being is a good design, safe and backed up by a lot of scientific proof, enjoy, share and please don't forget to like and share. This is what helps us stay in the upper ranks, aside for the amazingly well-researched information we share, we feel pretty confident of this statement.

### BACKGROUND OF PERCUTANEOUS COLLAGEN INDUCTION THERAPY

Facial skin resurfacing can be traced to ancient Egyptian times and the application of abrasive masks of alabaster particles. For millennia, various substances have been used to peel, exfoliate, and rejuvenate the skin. These substances include acids, poultices of minerals and plants, and direct irritants such as fire and sandpaper like materials.

#### The Early Stage

The evolution of chemical peeling and skin abrasion into the procedures in common use today began in the early 20th century. In 1905, a German dermatologist Kromayer first reported controlled resurfacing abrasion of the skin. His technique involved the use of rotating wheels and rasps and, except for technical improvements of the equipment, differed very little from present-day skin abrasion. He treated acne scars, keratoses, and areas of hyperpigmentation.

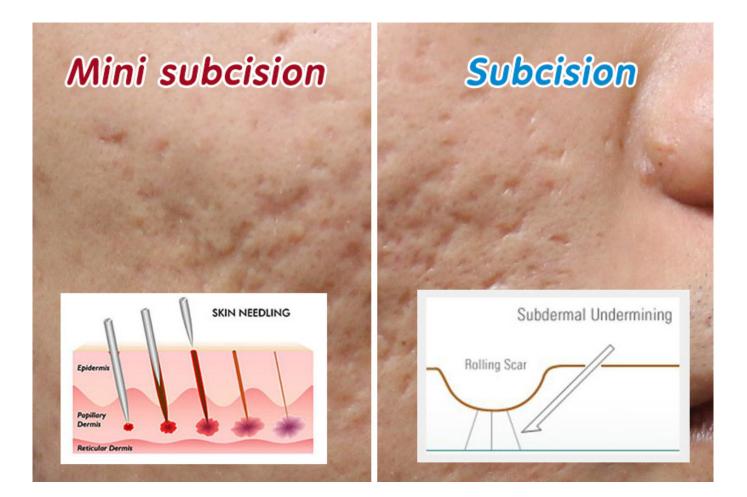
Despite this early report of the use of surgical planning, skin abrasion did not gain widespread popularity until the early 1950s, when Kurtin, McEvitt, and others published numerous articles on skin abrasion, leading to a rediscovery of the technique. Kurtin presented the first series of patients who underwent skin abrasion to Mount Sinai Hospital in 1953. Kurtin described the use of high-speed rotary abraders, intraoperative freezing, and a variety of abrasive end pieces. Moderate skin abrasion technique was developed in Italy in early 1980's by Swiss french dermatologist, Dr. Philippe Simonin utilizing electroridopuncture technique with microcurrent and acupuncture needling; its use was widespread in European countries prior to its introduction and popularity in the United States.

#### Subcision

The first to notice the major advantages of skin needling were Orentreich et al in 1995. They were the first to introduce the term Subcision® from the contraction of the term 'Subcutaneous Inversionless' surgery. It is a method of cutting under a depressed scar, wrinkle or contour using a tri-beveled hypodermic needle inserted under the skin through a needle puncture, adjacent to the scar. The procedure attempts to raise the base of the defect to the level of the surrounding skin surface by 2 distinct mechanisms:

The act of surgically releasing the skin from its attachment to deeper tissues results in skin elevation.

The introduction of a controlled trauma initiates wound healing with consequent formation of connective tissue that augments the depressed scar.



#### The technique involves 3 different approaches:

simple linear inserting-withdrawing movement of the needle under the scar.

fanning horizontal movement of the needle under the scar. vertical movement of the needle under the scar.

#### Advanced Needle Abrasion

The next important publication concerning skin needling was reported by Dr. Andre Camirand et al. who in his article in 1997 described his experience with this method. On a number of his patients with facial hypochromic scars, he tattooed the scars with a skin color pigment. After 1-2 years, they noticed that even though the pigment was long gone, it was replaced by actual melanin, while the scars were immensely improved in texture, appearance, and color. This gave the idea that trepanation (coming from the Greek word - Trepanon: to bore) of scars with the tattoo gun was responsible for the improvement and the repigmentation of the scar. They came up with the idea that puncturing of the scar with a tattoo gun alone, without pigment, would in a way break down the scar collagen, cause realignment and stimulate melanogenesis. The results of repetitive sessions on scars were reported by Camirand et al. to be more than good and typically consistent, since all of his patients profited aesthetically from this type of treatment.

Following to Dr Camirand's development, Dr. Des Fernandes introduced needling device, a small needle stamp, to induce collagen and used as a regular treatment in his surgical practice. He delivered his first paper on skin needling of the upper lips to the ISAPS congress in Taipei 1996.

#### Development of Advanced Needle Device

After extensive research and further development of the skin needle abrasion technology, Clinical Resolution Laboratory, a California Company in U.S.A., re-invented new pattern of the device, called Derma Needling, and released the instrument to the outside US.





# Why INNOPen?

## To purchase or for more information contact Clinical Resolution Lab call 213-384-0500

The INNOPen microneedling pen is the world's most revolutionary micro-needling device perfected by the distinguished leader and pioneer of dermal needling technology, <u>Clinical Resolution Lab</u>, <u>Inc</u>.

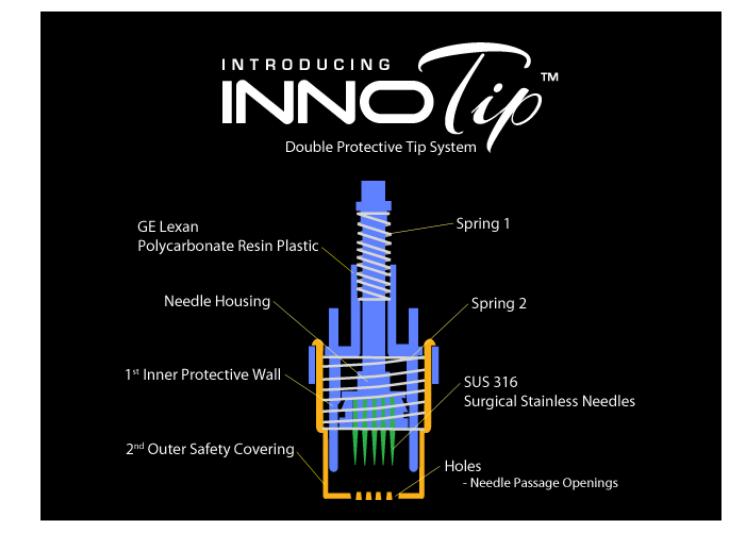
Choose INNOPen and INNOTip because quality & safety matters!

Made in the USA Doesn't overheat Fully adjustable needle depth (1 mm) and speed Patented high-speed motor design with accurate power control Ergonomic design for effortless handling Yields consistent results INNOPen is Safety:

Patented disposable needle cartridge, INNOTip Double protective tip system On/Off needle motion control at the tip No tearing, no scratching of skin No cross contamination 100% contaminant free, all medical components Surgical stainless needles, GE Lexan Polycarbonate Resin Plastic



INNOPen is an aesthetic precision tool with a unique, dual spring-loaded disposable needle cartridge (INNOTip) that uses an automated, vibrating stamp-like motion to cause microinjury to the skin. The gentle stimulation of fibroblast promotes natural induction of collagen and elastin without the stress of pain and lengthy downtime associated with ablative treatments. Micro channels resulting from the needles piercing through the skin layers aid in infusing therapeutic serums for greater penetration and enhancement of overall efficacy. INNOPen is an ideal choice for non-surgical and non-ablative treatment of various skin conditions.

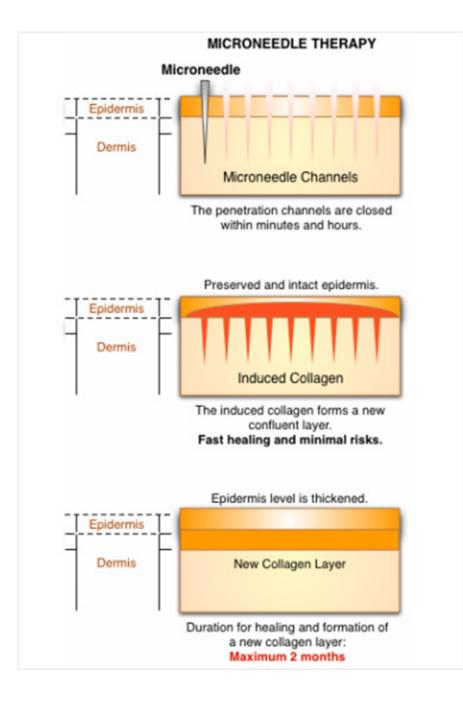


# **INNOTip**

At the heart of INNOPen is it's revolutionary, patented disposable needle cartridge called INNOTip. Distinctively engineered by Clinical Resolutions Lab, Inc., INNOTip delivers the safest method of treatment with innovative technology that eliminates the negative risks inherent in all automated microneedling pens or devices with open tip needle cartridges. INNOTip is a precision apparatus designed with Double Protective Tip System that consists of an inner protective wall and the outer safety covering made of sterile, medical grade GE Lexan polycarbonate resin. These protective layers allow 0% tolerance for error; requiring perfect centering, precise spacing and meticulous uniformity in the vertical lining of the needles.

The first 'inner' protective wall is built-in tightly around the needle housing that holds thirteen SUS 316 surgical stainless needles. It serves to prevent the needle housing from shaking and becoming off-centered due to flux of vibration caused by the device's motor exerting power during the stamping motion. A common attribute of the needling housing found in all single-walled needle cartridges is that it is loosely suspended in between the wall. Hence lacking the support to hold it firmly to prevent from shaking or vibrating as the needles pierce through the skin layers in fast stamping motion. Consequently, it leads to slanted needle insertion which induces micro-tearing of skin's inner layers and epidermal scratching.

The second 'outer' safety covering is unlike any of the open tip needle cartridges available in the market today. it is completely enclosed with only the thirteen passage-openings. All needles must pass through these tiny holes before they perforate the skin. The outer tip is designed to detect any deformity and/or misalignment of the needles. If the needle is bent of out of position, it will lock up and the INNOTip stops operating. The ensures accurate 90-degree vertical needle penetration with every stamping motion, but more importantly, ensures client safety.



In addition, the outer safety tip also enables even distribution of pressure applied to the needling area. The enclosed cover keeps the skin taut and even-leveled during the treatment to allow consistent accuracy in needle penetration depth. In comparison, the open needed tip causes the skin to 'bulge up' as it presses downward onto the skin. As a result, the needles are inserted at an uneven height. Open needle tip forces the user to manually manipulate the hand pressure applied to the device during the procedure, which can lead to considerable variance between the desired depth versus the actual depth of penetration.

The dual-spring system is another unique feature of INNOTip that allows the user to have full control over the needle motion. In contrast to competitor's devices where the only way to stop the needle insertion is by completely shutting off the device, INNOTip offers On/Off control right at the tip. No need to push any buttons or twist anything; simply release the hand pressure applied to INNOTip and the skin needling stops immediately. To turn on, gently press down and the needle will resume it's stamping action. The ability to control needle movement throughout the course of treatment eradicates potential risks associated with common disposable tips. On the contrary, the erroneous practice of dragging the open tip while the needles are still in motion results in epidermal scratching. Micro-tearing of the skin's inner layers is a direct consequence of jerking when the device is pulled whilst the needles are still inserted in the skin.

Epidermal scratching and micro-tearing of skin contribute to many post-treatment complications and/or side effects such as hyperpigmentation, excessive inflammatory response, skin irritation, and discomfort. Such conditions downgrade the overall enjoyment and depreciate the integrity of the microneedling treatment.

In essence, INNOTip offers effortless perfection that truly surpasses all limits by taking micro-needling technology to

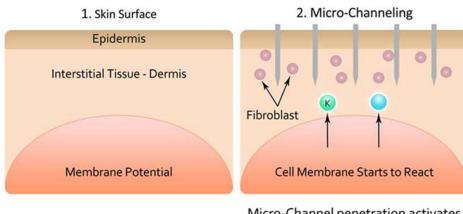
another dimension.

# Micro needling

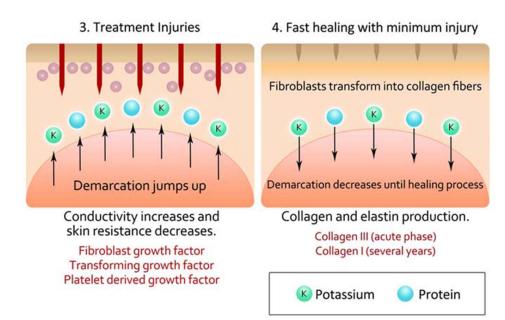


Micro needling is a non-surgical skin care treatment that causes microinjections/micro-injuries in your skin so that growth factors are released to elicit collagen and elastin growth. This is a natural form of skin rejuvenation that can be more cost effective than plastic surgery and can get much better results than other ablative procedures such as laser treatments. The results with micro needling are AMAZING and it gives you YOUTHFUL looking skin at a fraction of the cost.

# Principle of micro needling



Micro-Channel penetration activates regeneration of fibroblasts and causes membrane potential to release Potassium and Protein.



Micro needling relies on the principle of neocollagenesis and neovascularization that occurs as a result of the release of growth factors following needle piercing of the stratum corneum. These growth factors are believed to be responsible for the beneficial effects of the procedure in the treatment of scars and photo aging. Two hypotheses have been proposed to explain the mechanism of action of micro needling:

Formation of microchannels with resultant healing response: previously, it was proposed that following micro needling, thousands of microchannels or tiny wounds are produced through the epidermis into the papillary dermis of treated skin. These microchannels create a confluent zone of superficial bleeding that acts as a powerful stimulus for the release of various growth factors such as platelet-derived growth factor (PGF), transforming growth factor alpha and beta (TGF- $\alpha$  and TGF- $\beta$ ), and fibroblast growth factor (FGF), which initiate the normal process of wound healing by stimulating the migration and proliferation of fibroblasts that promote collagen deposition

**Production of a demarcation current:** it has been hypothesized by Liebl that when the microneedles penetrate the skin, a demarcation current is produced among cells rather than wounds. It is the demarcation current that triggers a cascade of growth factors that stimulate the healing phase. This hypothesis, based on the generation of bioelectricity, was proven by Jaffe. In resting state, the interior of epidermal cells has a negative electric potential of -70 mV whereas interstitium and epidermal surfaces have a positive potential. An epidermal injury causes the release of potassium and proteins into the interior of epidermal cells, further decreasing the electric potential to -120 mV or less. This leads to an increase in the potential difference between the interior of the cell and the exterior environment. It is claimed that this potential difference triggers the migration of fibroblasts to the site of injury where they proliferate and lay down collagen.



### Frequently Asked Questions

#### What are the Benefits of Innopen Collagen Induction Therapy?

The benefits of micro-needling are a reduction in the appearance of fine lines and wrinkles, younger-looking skin with fewer signs of aging. Innopen also has a positive effect on hyperpigmentation as well as on hypo-pigmentation, acne scars, traumatic scars and stretch marks and generally creates a fresher appearance or glow to the skin.

#### What areas of the body can I treat with Innopen?

Innopen can be used on all parts of the body; Face, neck, décolleté, arms, hands, legs, abdomen and back.

#### What does it Feel Like?

The feeling associated with the Innopen is similar to light sandpaper being moved across the skin. While some areas are more sensitive than others, the speed of the reciprocating needle tip reduces discomfort while the applied hydrating gel also makes the treatment more tolerable.

#### How long does the Innopen procedure take?

The procedure takes 15-30 minutes depending on the size of the area treated.

#### What is the downtime?

Immediately after the treatment, you will notice a bright redness to the skin.

The total healing time depends on the depth of needles used and the number of overlapping passes your skincare professional performs. On average, patients are red up to 2 to 4 days. Some patients heal completely in as little as 24 hours.

#### When will I see the results?

Patients notice an immediate "glow" to their skin. Visible changes to the skin develop over the course of several days and weeks. Results continue to improve up to 6 months after the treatment as collagen production continues.

#### How many treatments will I need?

Some patients only require a single treatment, once per year to achieve optimal results. However, it is recommended for most patients to receive a series of 2-3 treatments spaced about 6-8 weeks apart. For patients with deep wrinkles, advanced photo-aging, stretch marks or acne scars it is recommended to receive 6-8 sessions at 6-week intervals.



## <u>100% Pure Red Wine Resveratrol</u> <u>Antioxidant Serum</u>

Quench your skin's thirst with this deeply hydrating, antioxidant-packed serum to rehydrate and nourish your skin



# <u>100% Pure Acai Berry Antioxidant Face</u> <u>Cream</u>

This nourishing all natural facial cream immediately moisturizes and feeds your skin with vitamins and antioxidants.



# <u>Cosmedica Hyaluronic Acid Promotion BUY</u> <u>ONE 8oz /GET ONE FREE 1oz</u>

Pure Hyaluronic Acid Serum Offers Effective Hydration and Anti-Aging Benefits For a Youthful Appearance to Skin.



# Eminence Organics Citrus & Kale Potent <u>C+E Serum</u>

Fast-absorbing, advanced serum for all skin types. This potent dose of non-irritating Vitamin C is stabilized by botanicallyderived ferulic acid to deliver optimal antioxidant benefits and improve the appearance of skin.



# Eminence Organics Strawberry Rhubarb Hyaluronic Serum

Reawaken your skin with the hydrating power of Strawberry Rhubarb Hyaluronic Serum from Eminence Organics. This replenishing and rehydrating serum includes potent moisturizers, soothing factors, and gentle exfoliants that work together to give your skin the royal treatment.



# Eminence Organics Soothing Chamomile <u>Tonique</u>

You'll love the way Eminence Organics Soothing Chamomile Tonique (4.2oz) feels when the refreshing mist hits your face! Perfect as a daily soothing toner or pairs with more invasive dermatologic procedures, this facial treatment calms irritated skin and promotes the healing process



# **Eminence Organics Rosehip Tonique**

Eminence Organics Rosehip Tonique balances oily, problematic skin with an infusion of nourishing nutrients. Revive your skin with this rejuvenating spritz. Deliciously aromatic and immediately soothing, Rosehip Tonique will add a radiance to your skin while removing and regulating oil production.



# Eminence Organics Calm Skin Arnica Booster-Serum

Calm Skin Arnica Booster-Serum from Eminence Organics is a super-soothing skin treatment that uses natural botanicals to soothe inflammation, reduce redness, and eliminate irritation. This amazing treatment brings balance to the skin, restoring a youthful glow.