



ACUPUNCTURE TECHNIQUES

## Microneedling: Choosing a Pen (Pt. 2)

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### WHAT YOU NEED TO KNOW

- Choosing the right microneedling device for a practice requires careful consideration of various factors.
- Training, marketing materials, and customer support are crucial for success in incorporating microneedling into a practice.
- By considering all the factors (discussed in both parts of this article), practitioners can choose a microneedling device that is safe, effective, and meets their specific needs.

*Editor's Note:* Pt. 1 of this article ([January issue](#)) discussed other considerations when choosing a microneedling pen, including pen size, diameter, cartridges, and materials.

### Nanoneedles

Nanoneedling is much less invasive than microneedle cartridges and allows up to 97% product absorption. Nanoneedling doesn't require any numbing cream and has zero downtime. Nanoneedle cartridges come in either round or square shapes. Nano needles are 110  $\mu\text{m}$  and only penetrate the stratum corneum. I prefer square needles made of stainless steel and tipped with a thin layer of silicone.

### Round Nanoneedles

- *Gentle stimulation:* Round nanoneedles typically provide a milder form of stimulation to the skin due to their smooth, rounded edges. They are ideal for clients with sensitive or delicate skin.
- *Even distribution:* The round shape allows for a more uniform distribution of pressure during the microneedling process, reducing the chances of causing uneven punctures or microtears

in the skin.

- *Versatility*: Round nanoneedles can be used for a variety of skincare concerns, such as improving overall skin texture, promoting collagen production, and enhancing the absorption of skincare products.

### Square Nanoneedles:

- *Targeted treatment*: Square nanoneedles have sharper edges, which make them suitable for targeting specific skin concerns, such as acne scars, fine lines, or hyperpigmentation. The square shape allows for precise application and more targeted stimulation.
- *Enhanced penetration*: The square edges of the needles can create microchannels that penetrate deeper into the skin compared to round needles. This can be beneficial for clients looking to address deeper skin imperfections.
- *Customization*: Square nanoneedle tips often come in different configurations, such as different needle lengths or arrangements, allowing for more customization based on individual client needs and desired outcomes.

Ultimately, the choice between round vs. square nanoneedle tips depends on the client's skin condition, sensitivity, and the specific goals of the treatment. It is important to consider factors such as skin type, desired results, and the recommendations provided by the manufacturer or supplier of the microneedling equipment.

### Battery Life

The battery life of the microneedle pen can depend on several factors including the usage patterns and settings with which pens are generally equipped. Rechargeable lithium-ion batteries are typical for microneedle pens.

With regular usage, the battery of a microneedle pen should last anywhere from one to three hours before requiring a recharge with continual use. If you use the microneedle pen intermittently, such as for shorter sessions or occasional treatments, the battery should last longer; potentially up to several days or even weeks depending on the frequency and duration of use.

To ensure uninterrupted usage, it's recommended to charge your microneedle pen fully before each treatment session, especially if you anticipate a longer treatment time. This is why it is important to purchase a pen which has two rechargeable batteries, plus a cord in case neither battery is charged.

It's always a good practice to follow the manufacturer's guidelines regarding charging and battery maintenance to maximize the lifespan and duration of the device. Note the above estimates are approximate and can vary depending on usage; higher speed or power settings may consume the battery faster compared to lower settings.

### Storage Case

Having a storage case is not a necessity, but it is useful to maintain your investment by storing it in a custom metal case that will allow for ease of transportation, protection, cleanliness, and storage.

### Warranty

When choosing a pen system, look for one that provides a full replacement warranty. Since pen parts cannot be repaired, any pen you purchase should come with a full replacement policy on the parts and the pen.

## Serums

There are many options for products to use when microneedling. The product of choice in most instances is hyaluronic acid. It must be the first ingredient listed and should provide adequate “slip” to avoid the needles dragging on the skin. Most important are the safety and hypoallergic nature of the products.

When looking for products, these are the important things to know:

- Are the ingredients organic?
- Are the ingredients vegan?
- Does the manufacturer list the ingredients on the bottle?
- Is it shelf stable up to one year?
- What other ingredients are included? Ingredients like vitamin C and hyaluronic acid are key for microneedling. Among vitamin C options, magnesium ascorbyl phosphate (MAP) and sodium ascorbyl phosphate are more stable and less likely to cause skin irritation compared to pure ascorbic acid. They are also effective in brightening the skin and promoting collagen synthesis.
- Avoid ingredients such as copper, which can irritate the skin and cause granulomas - an uncommon, but possible side effect in those who are allergic to copper.
- Whatever product line you choose should include an aftercare serum, which allows your patient to care for their skin and soothe any irritation after they have left your office.
- Consider the manufacturer and where the ingredients are coming from. Are they made in a lab or in small batches? Who has formulated them? Are they produced in the U.S. or overseas?

## Settings

Settings on a microneedle pen should be easy to read. Typically, there are two settings that need to be distinguished. The first is the speed of the pen. I prefer a pen with a large LED display that is easy to read so there is no question what speed I’m using when I am working.

The second is the adjustment ring, which determines the depth of the needles when needling. The adjustment ring numbers should be easy to read, even if you have a protective sleeve over the pen. The numbers should be large and in a different color than the pen itself. The arrow pointing to the numbers should be obvious as well.

## Versatility (Cord / Battery)

Versatility in power sources is important, especially if you are running a busy practice. I prefer the convenience of a battery plus a backup. On the outside chance that both batteries are being charged, a long cord attachment can be a lifesaver in a busy practice as well.

## Support

Microneedle pens require training and support. Live, livestream or recorded training which includes continuing-education credits benefits you and your practice. Your investment in a pen system must provide for marketing materials: a page for your website, brochures, before and after photos, blog posts, take-home instructions for your patients, etc.

## Key Take-Home Points

Choosing the right microneedling device for a practice requires careful consideration of various factors. The device should be made of durable materials, offer adjustable speed and needle depth,

and have a secure cartridge connection. Needle count, diameter, and material should align with the treatment goals and client's skin type. Nanoneedling options should be evaluated based on the desired level of stimulation and penetration. Battery life, warranty, and the availability of a storage case are also important.

Serums used during microneedling should be safe, hypoallergenic, and include beneficial ingredients like hyaluronic acid and stable forms of vitamin C. The manufacturer's reputation and ingredient sourcing should be assessed. Clear settings and versatile power sources enhance usability. Training, marketing materials, and customer support are crucial for success in incorporating microneedling into a practice.

By considering these factors, practitioners can choose a microneedling device that is safe, effective, and meets their specific needs.

FEBRUARY 2024