

## Combined fractional epidermal and dermal subablative rejuvenation

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Venue: The Mira Hotel, Hong Kong  
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There are several laser-based ablative resurfacing and nonablative rejuvenation technologies available for improving the appearance of the skin. However limitations exist in these systems. Although nonablative systems can give mild to moderate improvement in skin tone and texture with no downtime, they require multiple treatments. Ablative systems are able to produce better esthetic results, but they have a prolonged downtime post treatment and carry the risk of post inflammatory hyperpigmentation, especially in patients having pigmented skin types.

A more recent technology, known as 'subablative rejuvenation', employs fractionated bipolar radiofrequency energy. It offers a shorter downtime than conventional ablative resurfacing technology. This technology is suitable for treating wrinkles, acne scars and other skin tone or texture irregularities.

Subablative means the ability to generate heat at a depth below the epidermal surface and at the same time produce minimal epidermal

disruption. Fractionated bipolar radiofrequency based technologies can produce high volumetric heating by tissue impedance and subsequent heat diffusion to deeper tissue. By applying thermal energy to the dermis, a cascade of physiological healing responses can be activated to promote re-epithelialization superficially and extracellular matrix remodeling in the dermis.

Healing is more rapid with minimal downtime because only 5% of the epidermis is disrupted, as compared with 10-70% of epidermal disruption in fractional ablative laser treatment. The downtime of subablative rejuvenation is usually less than 48 hours and post inflammatory hyperpigmentation is not common. This treatment is effective in improving wrinkles and skin tightness. Pain experienced by patient in this treatment is usually minimal. If needed, topical anaesthetic agent can be applied before the procedure.

### Learning points

Subablative rejuvenation is a recent technology that employs fractionated bipolar radiofrequency energy for improving the skin appearance. Subablative means the ability to generate heat at a depth below the epidermal surface and at the same time produce minimal epidermal disruption. It offers a minimal downtime and satisfying results.