

5 Trending Facial Treatments that are Secretly Damaging your Skin



The skin is the largest organ in your body and a critical part of our personal identities. Caring for skin is essential for our wellbeing and mental health regimes. Many often seek 'quick fixes' and 'instant results' when it comes to facial treatments, but this mentality constantly damages skin and produces more harm than good. Dermoi's Chief Scientific Officer, Eve Casha, MSc Pharmaceutical Formulation has reviewed the top facial treatments on the market to shed light on which treatments may harm the skin and accelerate photoaging in the long term.

1. Deep Micro-needling

Micro-needling is a newer treatment that involves creating microchannels (tiny holes) in the skin to stimulate wound healing responses, collagen production, and increase penetration of topical products. When performed properly, micro-needling treatments have proven to be very effective with minimal disruption to the skin barrier. However, many micro-needling treatments involve aggressive movements and micro-needling devices with long needles. This causes trauma to the skin and has been proven to cause facial scarring (tram track scarring), pigmentation issues (post-inflammatory hyperpigmentation), or infection. A credible source for micro-needling treatments in which the micro-needle depth and procedure are controlled is essential.

1. Cohen, BE & Elbuluk, N. (2016) Microneedling in skin of color: A review of uses and efficacy. *Journal of American Academy of Dermatology*. 74 (2), 348-355.
2. Pahwa, M Pahwa, P & Zaheer, A.(2012) "Tram Track Effect" After Treatment of Acne Scars Using Microneedling Device. *Dermatologic Surgery*. 38(7), 1107-1108.
3. Aust et al. (2008) Percutaneous collagen induction therapy: an alternative treatment for scars, wrinkles, and skin laxity. *Journal of the American Society of Plastic Surgeons*. 121(4), 1421-1429.

2. Dermaplaning

Dermaplaning is a recent viral trend that involves scraping a blade across the skin for exfoliation and to remove thin hairs (peach fuzz) to give an instantly smooth finish. However, there is minimal scientific evidence backing up dermaplaning for any skin benefit. In addition, this treatment is normalised for at home and consistent use, but repeated use can have negative consequences for the skin barrier, leaving skin sensitive to UV radiation, free radical damage, inflammation, and post-inflammatory hyperpigmentation.

1. Pryor et al. (2011) Dermaplaning, topical oxygen, and photodynamic therapy: a systematic review of the literature. *Aesthetics Plastic Surgery*. 35, 1151-1159.

3. Medium-Depth Facial Peels

Chemical peels induce deep exfoliation to stimulate cell renewal and facial rejuvenation. They are categorized based on how deep they exfoliate in the skin and have been used for decades. Superficial facial peels exfoliate the epidermis, however, medium-depth and deep facial peels exfoliate down to the dermis. However, medium-depth facial peels cause damage to dermal proteins as well as cell death, swelling and severe damage to the epidermis. They require extensive 'down-time' after the treatment in which consumers cannot go to work, must shield from the sun, and are at risk of infection. These peels should be performed as one-off procedures, but many are seeking medium-depth treatments regularly causing repeated trauma to healthy skin.

1. O'Connor et al. (2018) Chemical Peels: A review of current practice. *Australian Journal of Dermatology*. 59 (3): 171-181.
2. Monheit, G. (2001) Chemical Peeling vs. Laser Resurfacing. *Dermatologic Surgery*. 27 (1), 213-214.
3. Lee et al. (2019) Basic chemical peeling: Superficial and medium-depth peels. *Journal of American Academy of Dermatology*. 81 (2), 313-324.

4. Microdermabrasion

Microdermabrasion is a non-invasive physical exfoliation procedure that removes the skin barrier. The treatment can mildly help to smooth skin surface texture, hyperpigmentation, and stimulate changes to collagen production after multiple sessions. However, microdermabrasion is very abrasive and causes massive disruption to the skin barrier. This leaves the skin in a compromised state that is inflamed and more vulnerable to damage from the environmental free radicals and UV radiation. This will aggravate skin conditions and can increase photoaging over time. Certain studies on microdermabrasion will exclude clients with sensitive skin types or a tendency for scarring as they are at higher risk for complications.

1. El-Domyati et al. (2016) Microdermabrasion: a clinical, histometric, and histopathologic study. *Journal of Cosmetic Dermatology*. 15(4),503-513.

5. HydraFacial

Hydrafacials use a technique called hydradermabrasion. In the Hydrafacial procedure, hydradermabrasion is combined with a chemical peeling serum, followed by pressure extraction, and an antioxidant rich serum. While hydradermabrasion is more gentle than traditional microdermabrasion and can clear comedones (whiteheads/blackheads) and stimulate collagen production, the technique itself disrupts the skin barrier and is likely to be sensitising for many. For those with inflammatory acne, rosacea, or general sensitivity, such abrasion and extraction may increase problems.

1. Freedman, BM. (2008) Hydradermabrasion: an innovate modality for non-ablative facial rejuvenation. *Journal of Cosmetic Dermatology*. 7(4), 275-280.
2. Kim et al. (2015) The effect of physically applied alpha hydroxyl acids on the skin pore and comedone. *International Journal of Cosmetic Science*. 37(5), 519-525.

So... What's the way forward?

While some may look at the complications of certain facial treatments and assume the risk is low, overtime, repeated use of such treatments is wounding the skin and making skin conditions worse.

**“We need to re-learn our approach to skincare
and change how we care for our skin”**



***Eve Casha,
- Chief Scientific Officer at Dermo!
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