

When Razor Meets Skin: A Scientific Approach to Shaving

by Dr. Diana Howard

A survey conducted by The International Dermal Institute indicates that 79 percent of male respondents say they have one or more skin problem(s) that they notice daily, and yet the selection of their shaving products rarely takes this into account. Shaving can not only result in razor burn, ingrown hairs and razor bumps, but it can lead to increased sensitization and inflammation that results in premature aging.



Unfortunately, as the average man's beard grows two millimeters per day, there is ample opportunity to create an inflamed skin condition during shaving. As a matter of fact, if the average man starts shaving at age 13 and continues until he is 85 years old, and assuming he spends all of five minutes shaving each day, he will devote over six months of his life to just shaving his beard.

As professional skin therapists, we may not be shaving our clients, but with the ever increasing number of men in skin treatment centers, salons and spas, we need to educate them about their specific skin care needs as it relates to shaving.

Problems Associated with Shaving

We know that the simple act of shaving imposes constant stress on the skin. Shaving is a form of physical exfoliation that can impact the health of the skin. Razor bumps, ingrown hairs, razor burn and inflammation are just some of the visible signs of trauma that the skin endures when a razor is used on the beard. Shaving triggers a high level of visible irritation and can lead to over-exfoliation, as well as a compromised lipid barrier.

Our epidermis relies upon the lipid barrier layer that is part of the Stratum Corneum for protection. This layer of lipids keeps moisture in the tissues and controls the entry of external chemicals from entering the deeper layers of the skin. During shaving, the barrier lipid layer can be compromised, especially if the man is in the habit of using alcohol-laden aftershaves, which can remove the lipids comprising this integral part of the Stratum Corneum. Once the barrier lipid layer is compromised, water readily escapes from the underlying tissues, creating a dehydrated skin condition. Chemicals from the environment can now penetrate into the skin, causing irritation and a sensitized skin condition. Once inflamed, anything can irritate the skin, including daily shaving.

In addition to all of the symptoms that sensitized skin may experience, we now know that inflammation leads to premature skin aging, which will undoubtedly also be a concern for the client.

Shaving Concerns that Affect Skin

An additional survey conducted by The International Dermal Institute indicates that the top three shaving concerns for men are Pseudofolliculitis Barbae, razor burn and coarse heavy beards.

Pseudofolliculitis Barbae

Pseudofolliculitis Barbae includes ingrown hairs and razor bumps. Both of these skin issues are prevalent in African American men or individuals with coarse, curly beard hairs. Studies have shown that the hair follicle on African American men is oriented more horizontal in the dermis rather than upright; when the hair grows with a kink or curl it winds around like a corkscrew, making it more likely to turn into the skin, forming an ingrown hair. Ingrown hairs may also occur when the hair emerges into the skin at an improper angle. The simple process of shaving the end of the hair can force the hair back into its follicle and grow inward instead of exiting the skin.

The body recognizes this ingrown hair as a foreign body (similar to the way it would a splinter) and triggers an inflammatory response that includes redness, itchiness and a raised area that resembles a pimple that can fill with puss.

Razor bumps form when the hair emerges from the follicle and turns and enters an adjacent follicle. The skin responds similarly to an ingrown hair and often produces a keloidal tissue mass over the hair. This results in the characteristic razor bump.

To help prevent ingrown hairs and razor bumps, start by exfoliating with physical and chemical exfoliants prior to shaving. Physical exfoliants will help effectively exfoliate and prep the skin's surface, removing excess Stratum Corneum cells that keep the hairs embedded in the tissue. Chemical exfoliants, including Lactic Acid, Salicylic Acid and Retinol (Vitamin A), will help remove dead skin cells, lift ingrown hairs above the skin line and soften and smooth skin. Salicylic Acid is also an anti-inflammatory agent, which can help calm the skin. For sensitized skin, exfoliate in the evening rather than directly before shaving.

Razor Burn

Razor burn is inflammation of the skin that could classify as Irritant Contact Dermatitis (ICD) and includes any nicks, scratches and irritation associated with shaving. Razor burn can occur from:

- A reaction from certain substances or ingredients
- Shaving too closely and/or too quickly
- Inadequate lubrication during shaving
- Shaving against the grain of the hair (against the direction of the hair growth)
- Shaving over already irritated or sensitized areas
- Applying too much pressure during shaving (which only facilitates the removal of skin cells, resulting in excess friction and irritation)
- Shaving with a blunt blade (a sharp blade will require less pressure)

- Water

The symptoms of razor burn are burning, itching, stinging and redness. Razor burn can be just a few hours of mild discomfort and redness or it can last for days, resembling a rash or scratch that remains inflamed. It can manifest into a serious problem if the irritation evolves into infected breakouts or blisters.

Ingredients including Wheat Germ, Yeast Extract, Tocopherol (Vitamin E and its derivatives), Soybean Oil, Shea butter, Jojoba Seed Oil, Evening Primrose Oil and Silicones will help protect the skin's natural barrier lipid layer, helping to combat the irritation, reddening and mechanical peeling associated with razor burn. Look for products with Licorice, Green Tea, White Tea, Chamomile, Aloe Vera, Panthenol, Caffeine, Bisabolol, Comfrey and Allantoin to calm skin while promoting skin repair and fighting free radical damage.

Coarse, Heavy Beards

Depending upon genetics, ethnicity and hormones, a male client may have a heavy or tough beard. Heavier beards are more challenging to shave, as the hair shaft offers more resistance, frequently clogs the razor or the razor is not sharp enough to cut through the hair, causing painful scraping and tugging. As such, men with heavier beards are more likely to suffer from stinging, redness, nicks and cuts.

In order to ease the discomfort associated with shaving a heavier beard, the beard must be softened and lifted, and the skin must be protected. Often, products created for coarse beards focus only on softening the beard hairs to facilitate shaving; this is generally accomplished by using a high pH to soften the beard, making it less resistant to the shave. Unfortunately, the alkaline pH can strip the barrier lipids from the skin, leaving skin taut, dry and prone to sensitization. Look for products that contain humectants and conditioning agents to counter any dryness.

Ideally, use a pre-shaving medium that is applied underneath a shaving cream that softens and lifts the beard while protecting the skin. It should provide a cushion between the razor and the skin. The mere application and massaging of a pre-shave medium onto the beard will help lift the beard hairs.

Look for pre-shaving or shaving products that include:

- Camphor: a natural antiseptic that helps firm skin to lift the beard
- Clove Flower Oil: helps open the pores while softening the beard to prevent scraping and tugging of the hair
- Glycerin and Sodium Hyaluronate: add additional lubricity and hydration during shaving
- Wheat Germ Extract and Yeast Extract: combat irritation and redness while reinforcing the barrier lipid layer

If clients have a heavy, coarse beard, it is feasible for them to shave against the grain (against the hair growth), but only after first shaving with the grain (in the same direction as the hair growth); after the first pass the hair is shorter and less likely to curl back in on itself, minimizing chances for ingrown hairs. After

the initial shave with the grain, however, the client must re-apply all necessary shaving mediums before shaving against the grain.

Educate your Men!

Male clients must understand that there is more to shaving than just shaving! Not only do they need to consider their beard type, they need to consider their skin condition as well. Help your male clients select an adequate shaving system with products that will assist them pre-shave, mid-shave and post-shave, remind them to always wear sunscreen over freshly-shaved skin and educate them on how to shave properly.