



AS Permanent As It Gets

by David J. Goldberg, MD

When referring patients for laser hair removal, it is best to be familiar with one or two highly qualified laser physicians.

Five years ago, hair removal procedures consisted only of temporary and time-consuming methods such as plucking, tweezing, depilatories and waxing. Electrolysis was hailed as the first method to offer a more permanent solution, but not without limitations. Electrolysis is a hair-by-hair burn that is slow, tedious and often painful. On the face and other sensitive areas, the burn can cause pigmentation abnormalities and scars. And most significant, this reasonably successful method is practical only for small, sparse areas of hair growth. Larger areas such as legs, arms and bikini, and even dense growth on the upper lip, do not lend themselves to a system that can only remove a single hair at a time.

In 1995, hair removal took a great leap forward with simple and permanent treatment by laser. By targeting the pigment in the hair, lasers could destroy the hair growth centers and discourage re-growth. The results were more than encouraging. But, the first procedures were not universal. Laser treatments were only safe and effective for people with dark hair and light skin. In darker skin types, the dark pigment in the skin competed for the absorption of laser light with the pigment in the hair. As a result, the laser destroyed some of the skin's pigmentation and caused blisters and scars.

Medical science soon discovered how to get around this problem. Several laser varieties were born that offered a more universal hair removal system that would not overheat the skin. First, the Ruby E2000 laser added an important innovation that cooled the skin to minus 10 degrees Centigrade. This prevented blisters by offsetting the heat generated by the laser, and without disrupting the hair removal process. Next, the development of the long pulse duration laser offered another good solution for darker skinned clients. This method extends the laser "zap" over a longer period of time, thus reducing its intensity. By slowing down the delivery of light, the long pulse laser limits the heating effect to the skin and prevents blisters.

A third solution produced two new laser hair removal systems that are safe for all skin types. Like the other laser innovations, the Lyra and the Cool Glide contain improved cooling devices that prevent blisters and carry a lower risk of scarring. These systems use a wavelength that is not absorbed well by

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the pigment to begin with at highly accelerated levels. Their high-energy systems cool the outer skin while penetrating the hair for absorption of light. In addition, they are smaller and easier to transport from office to office. And they fire faster or have larger spot sizes attached to their hand pieces, which means faster, more efficient procedures with less discomfort.

Typically, laser hair removal takes 15 to 20 minutes and is conducted in a series of five to eight treatments, depending on the amount and type of hair and the condition of the skin. The newest lasers are a breakthrough for millions of people of Hispanic, African-American, Arabic, Mediterranean and other ethnic skin types who have previously been difficult to treat. The discomfort is minimal, the price is affordable and the results are impressive.

PFB and the Liability of Treating Darker Skin Types

Darker-skinned patients, particularly blacks, suffer in high proportion from a painful condition known as PFB (Pseudofolliculitis Barbae) or shaving bumps. The tendency of thick curly hair is that it does not grow straight out when it is waxed or shaved close to the skin. Instead, as it begins to grow out of the hair follicle, the sharp, thick hair is irritating to the skin. Because it is curly it often re-pierces the skin as it grows out, almost as if a tiny knife is cutting the skin and re-inserting itself as an ingrown hair. This creates small, inflamed, painful bumps, or PFB.

The secondary problem of PFB is that the inflammation leads to abnormal discoloration of the skin. One way to avoid this condition is to abstain from shaving or waxing. But, cosmetically, this is hardly a solution. A more promising solution is laser hair removal. This treatment leads to thinner, or in some cases, no hair growth, and miraculously, no bumps. The improvement in PFB is usually obvious after only one to two treatments. And the discoloration improves just by virtue of the decreased inflammation as a result of the laser treatment. (As an option, the addition of prescription bleaching creams can speed up this process.)

The Lyra and Cool Glide lasers remove the hair follicles and provide the PFB sufferer with long-term relief. This is important news to more than 12 million African-American men who suffer from PFB, as well as an undetermined number of women of a variety of cultures. Laser hair removal is the first procedure to eliminate this irritating, unsightly and previously untreatable problem.

Laser Fallout

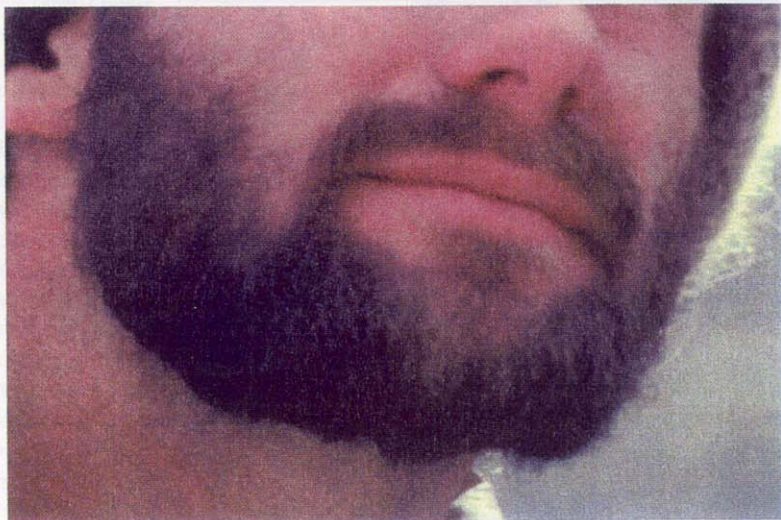
In my 15 years of laser surgery practice, I have seen an alarming number of patients who are victims of laser experimentation. Some have been treated by a dermatologist or plastic surgeon who was inexperienced with laser hair removal. And the results have not been good. The procedures were unsuccessful – or worse, created complications such as burns and scarring. That's when the patient comes seeking the help of a more experienced laser physician to fix the problems created by the first doctor.

Unfortunately, a complete reversal of the consequences of a bad treatment is not likely. When a laser leaves a scar, the scar is usually permanent. Another laser treatment will not undo the injury. The only key is prevention through caution. While laser surgery is fast becoming as routine as filling a tooth cavity, doctors and patients alike should realize that it is still surgery. And the

power of the laser – an intensely concentrated beam of light that can resurface skin, soften wrinkles, cut tumors and urinary stones, lighten tattoos, or discourage the growth of excess hair – can also burn, discolor and scar, and should therefore never be taken lightly.

Until the skin laser industry is better regulated, it is the responsibility of the patient to find a laser physician with substantial training and experience under the guidance of an expert. If you are referring a patient for laser hair removal, you will do a great service by being familiar with one or two highly qualified laser physicians you can send them to. The physician should be experienced enough to recognize that different lasers are suited for different skin types as well as different hair types. Some lasers are better for darker complexions; some are better for lighter complexions. Lasers with shorter pulse durations (shorter zaps) are better for thinner hairs; longer pulse durations work better for thicker hairs. An experienced laser physician also knows that different parts of the body respond differently. Some machines provide better cooling mechanisms than others do, which lessens the pain. Some machines are safe for sun-tanned skin, while others are not. As in any profession, there is no substitute for experience. The skilled laser surgeon can work cosmetic miracles. The others may do harm.

Laser practitioners are urged to pursue the highest training to become masters of this exceptional field, offering the safest and most satisfying results to their patients. If we continue to raise the standards of excellence, laser technologies will continue to beautify the world for generations to come. ■



About The Author

David J. Goldberg, MD, is a board-certified dermatologist and the director of Skin Laser & Surgery Specialists of New York and New Jersey, LLC, the pioneers of FDA research on laser hair removal and skin rejuvenation. He is chief of dermatologic surgery at New Jersey Medical School. He is past president of the American Society for Laser Medicine & Surgery. His website address is www.drdauidgoldberg.com