SKIN REJUVENATION WITH FRAXEL LASER

By

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Dr. Hendler: Hello and welcome to KP Healthcast. I'm your host, Dr. Peter Hendler. Today our guest is Dr. Akhil Wadhera who's been with Kaiser Permanente since 2005. He is a Dermatologist here in Fremont, and he will be talking about Fraxel Laser Therapy for rejuvenating skin. Welcome, Dr. Wadhera.

Dr. Wadhera: Thanks Peter. Thanks for having me here.

Dr. Hendler: What is fraxel?

Dr. Wadhera: Fraxel is a revolutionary laser device that we've been using for the past few years to safely rejuvenate skin with very little downtime. We've used this laser now for three years and have had great success in reversing the signs of aging such as fine lines, wrinkles, uneven pigmentation, and even acne scars. This device has worked really well on the face, neck, chest, and even hands.

Dr. Hendler: What's so unique about this laser?

Dr. Wadhera: Fraxel was the first laser that provided physicians in the field of Cosmetic Dermatology and Cosmetic Surgery with a very unique technology for resurfacing the skin called fractionation. What is key about this technology is that the laser beam is not a continuous beam. In fact, it comes out of the laser as thousands of microscopic laser beams, as if it is coming out of a sieve. Each one of these laser beams is actually 1/10 of the diameter of a hair follicle. What happens is these laser microscopic beams damage a very small portion of the treated skin instead of a much more extensive resurfacing that was done with the old lasers. The older lasers used for resurfacing the skin in the past were the CO2 and the erbium laser and what they did was to completely peel several layers of the skin, leaving the skin very weepy, crusted and required several weeks of very diligent care on the part of the patient. The new skin that formed after the resurfacing came from stem cells that were in the hair follicles. This was a very slow process and resulted in healing time sometimes a few weeks to a few months. Not only were the patients taking a lot of time off work, they also ran a significant risk of getting serious infections, and even permanent scarring. Because of these two factors, the popularity of these older lasers had been waning for the past few years until the introduction of the fraxel laser.

With the fraxel laser, we only treat a fraction of the skin so the healing is much faster. The patients can actually go back to work within a few days after the treatment. What the fraxel laser is doing is actually allowing the natural healing process in our body that works from inside out to begin to replace the sun damaged tissue with new collagen and results in younger, smoother, healthier skin.

Dr. Hendler: Very interesting. I understand that there are a few different types of fraxel lasers. Could you tell us about that?

Dr. Wadhera: You are absolutely correct. There are actually three different types of fraxel lasers that the company makes and it is really important to know the names at least because they have different side effects, different healing times, different applications, and finally different costs for our patients.

The first fraxel laser is called Fraxel Refine. The second one is Restore and the third one is called Fraxel Repair.

At the current time, we're actually using in the Cosmetic Centers, the Fraxel Restore and the Fraxel Repair which we'll talk about in the rest of this pod cast with kind of more focus on those lasers. The patients can call the Cosmetic Centers located throughout the northern California region to find out which fraxel is currently being offered at their center.

Dr. Hendler: What are some of the conditions that are treated with these fraxel lasers?

Dr. Wadhera: Fraxel Family Lasers has actually been FDA approved for several applications. The most common ones that we use it for are wrinkles, fine lines around the eyes and the mouth, brown spots that people get from sun, and more exciting, the newer thing that we're doing with it, is the acne scars and the surgical scars. It also helps shrink the pore size and improve the irregular textures some patients have.

Dr. Hendler: What's the downtime for each procedure?

Dr. Wadhera: Before we talk about the downtime of the laser, let's make sure we separate the two lasers. Let's talk first about the Fraxel Restore. Usually, when we do the Fraxel Restore laser, the patient can return to normal activity within two to three days. I usually perform the Restore laser treatment on a Friday and for the most part, the patients can go back to work or their normal activity by Monday.

The Fraxel Repair laser is much more involved and much more intense. The downtime of that laser can be up to ten days. We usually go over all this information in a consult when the patient comes to see us initially.

Dr. Hendler: What are some of the side effects and risks that a patient should be aware of prior to taking a fraxel treatment?

Dr. Wadhera: That's a very good question Peter. Like with any medical procedure, there are always some risks involved. However I think overall fraxel is a much safer alternative to the other types of resurfacing that we have had in our clinics thus far.

For the Fraxel Restore laser, the most common side effects we see are swelling, redness, and some peeling. However, these are temporary and are gone by three to four days.

One of the side effects that we see fairly commonly especially in darker skinned patients is a temporary increase in pigmentation of the area treated. This is usually mild and we can actually treat it with bleaching creams and good sun protection but it is definitely something we go over with our darker skinned patients.

For patients who have a history of cold sores, we usually treat them with some antiviral medications prophylactically to reduce the risk of infections. Also something to keep in mind for our patients who have taken Accutane in the past six to twelve months, we have them hold off for the treatment for at least that much time, just so the Accutane is out of their system and the risk of scarring is reduced.

Going on to the Fraxel Repair laser, again since it is a little bit more aggressive, more downtime is needed. There are slightly more side effects that we see with it and again we go over all the information in a consult prior to the laser procedure.

Dr. Hendler: Okay. Is this the kind of thing where I will look good after one treatment or how many treatments do I need before seeing results?

Dr. Wadhera: That's a question that a lot of our patients are asking. Again, that depends on the type of laser. You remember I mentioned that we have two that we use, the Fraxel Restore and the Fraxel Repair. For the Fraxel Restore, most clinical studies have shown optimum results in about four treatments. However the actual number of treatments that you have will depend on the amount of sun damage, the amount of wrinkling, or amount of scarring you have prior to the treatment. When we sit down and have a consult, we go over all that kind of information with our patients and kind of come up with a plan as to how many treatments would be needed. I have had several patients who have had their series of four treatments but come in once a year for a freshening up that we do on a once a year basis.

Going to the Fraxel Repair, significant improvements in aspects of aging can be seen in just one treatment but if the patient so desires, we can repeat the treatment in another six months or so.

Dr. Hendler: Since I would need more than one treatment of Fraxel Restore, how are they spaced?

Dr. Wadhera: Usually a treatment of Fraxel Restore can be done every three to four weeks. However if somebody is very busy, you have some travel coming up, or come across unforeseen obligations, we can actually space it even more. I have several patients

who come in every two months because of their other obligations. It's a little bit flexible. The closest we do it is about three to four weeks.

For the Fraxel Repair as I mentioned, we usually do one treatment but if a second one was needed, we can space it about six months apart.

Dr. Hendler: How long do the results last?

Dr. Wadhera: For most of the resurfacing lasers, the improvement that one sees in their skin results from production of your own collagen. The collagen that you make actually lasts for several years and is gradually broken down by the normal aging process that is ongoing in everybody. With both these lasers since the improvement is based on generation of new collagen, the process is slow, and one continues to see the improvement in their skin in terms of lines and wrinkles, texture, pore size, and scarring for at least three to six months. After about six months, the improvement that we see stays with you for about five to six years, usually. So with Fraxel Repair, you see immediate improvement and progressive improvement, again related to collagen production.

Dr. Hendler: A question that comes to my mind is that this sounds to me like what people used to do for a facelift for Plastic Surgery. Does this compare in any way to Plastic Surgery or to a facelift to look younger?

Dr. Wadhera: That's a very interesting question Peter. The latest laser that Fraxel Company has produced which is the Fraxel Repair laser is actually taking tissue off the face. So we are seeing improvement somewhere comparable to a facelift because in the process of a facelift, the Plastic Surgeon is actually taking a portion of your skin off. With the Fraxel repair, you actually get tightening and loss of facial tissue. So we are seeing some results that are very similar and that is the very exciting part that we can do a laser that works not exactly like a facelift, but it's getting closer to a facelift.

Dr. Hendler: That's very interesting. Now I know the people listening to this would love to see and love to know if you have any before and after pictures of patients treated with these lasers.

Dr. Wadhera: Yes we do have several before and after pictures of our patients that have been treated with both these lasers on our web site. Our patients and members can go to www.KPcosmeticservices.com and go to the Photo Gallery section of the web site where they can see before and after pictures under the Fraxel Repair and the Fraxel Restore tabs.

Dr. Hendler: Okay. For those who can't spell, that's <u>www.KPcosmeticservices.com</u> and I am certainly going to go there after this recording. How do I learn more?

Dr. Wadhera: Members who are interested in seeing if Fraxel Repair or Restore is the right treatment for them, they can contact the Kaiser Permanente Cosmetic Service

Center nearest them. Again to find a location that is close to them, they can go to the web site that Peter just spelled out nicely for us. It is www.KPcosmeticservices.com.

Dr. Hendler: Very good. Do you have any last thoughts or comments?

Dr. Wadhera: Well, Peter, I am really excited about these lasers because we are able to do things applications wise that we weren't able to do before and also we are able to treat all different skin types which we weren't able to do with our previous lasers. I would encourage our listeners to go to our web site, check out the pictures and let us know if they have more questions. We will be happy to answer them.

Dr. Hendler: Very good and I had never heard of this before this recording so I am also quite interested in this and will look at those pictures.

Dr. Wadhera: Thanks very much and thanks for having me.

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