

Questions and Answers: ASCDAS 5th Annual Meeting

Renowned dermatologists R. Rox Anderson, MD; Richard E. Fitzpatrick, MD; Ranella J. Hirsch, MD; Vic A. Narurkar, MD; and E. Victor Ross, MD, were speakers at a general session focusing on lasers, light, and devices at the 5th Annual Meeting, Exhibition & Workshops of the American Society of Cosmetic Dermatology & Aesthetic Surgery (ASCDAS). They used their expertise to answer questions from fellow dermatologists attending the session. Selections from the question and answer segment are featured in this issue.

Q: We crudely use a Wood light to predict the level of melanin. Would the pigment meter be of any additional help in the prediction of the level of pigmentation in the treatment of melasma and for follow-up?

Ross: The pigment meter would probably not be more helpful than a Wood light. The Wood light is going to tell you more about the location of the pigmentation, so if you are trying to predict whether melasma is mixed, dermal, or epidermal, for example, the Wood light is going to provide some assessment of pigment distribution. If you're really trying to look for melasma predictability regarding treatment response, the Wood light is probably going to prevail over the pigment meter. The Wood light, however, might be helpful in objectively assessing the response to therapy.

Q: Are any of you aware of any laser device currently available that fairly consistently will produce cosmetically

Dr. Anderson is Professor of Dermatology, Harvard Medical School, and Director, Wellman Center for Photomedicine, Massachusetts General Hospital, Boston. Dr. Fitzpatrick is Director of Dermatology, La Jolla Cosmetic Surgery Centre, California. Dr. Hirsch is Director, Skincare Doctors, Cambridge, Massachusetts. Dr. Narurkar is Director, Bay Area Laser Institute, San Francisco, California. Dr. Ross is Director, Laser & Cosmetic Dermatology Center, Scripps Clinic, San Diego, California.

Dr. Hirsch is a consultant for and has received equipment and research fees from Candela Corporation; Cynosure, Inc; HOYA ConBio; and Palomar Medical Technologies. Dr. Ross is a consultant for Palomar Medical Technologies

significant amounts of hair in male pattern baldness or decrease hair loss in male pattern baldness?

Anderson: In Europe, there are salons that use red light to try to stimulate hair growth, and there is some evidence that it works. For example, patients with porphyria will naturally grow hair, including men who develop porphyria after they develop male pattern hair loss. So there is some hope, but I do not think there is anything on the market now that is proven to work well.

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Q: With regard to complications in patients who have undergone a laser treatment, how do you manage them acutely? What do you do initially when someone has a burn? What types of things do you prescribe?

Ross: If it's an epidermal burn, you would treat it as you would most other wounds. Initially, if it's a wet wound, I try to dry it either with Domeboro soaks or dilute vinegar soaks, and then, once it dries, sometimes I use steroid ointments. If I anticipate right after treatment that something bad is going to happen, I'll use prednisone 40 or 60 mg once and then maybe 20 mg for 3 subsequent days. That's quite rare because then you have to anticipate that something bad is going to happen. But, I just acutely treat burns with Domeboro or dilute vinegar soaks. Later, one can use either silverdine or bacitracin as the wound goes to a dry phase. If it is a large, significantly denuded wound and susceptible to infection, I'll prophylactically put the patient on antibiotics.

Q: I've been wondering if anyone has any comments about radiofrequency devices and potential nerve or neural interaction with them.

Anderson: These devices have been around since the 1930s and 1940s, and there's no particular proclivity for the radio frequency to damage nerves. However, there's no particular selectivity for it not to, so you can, in fact, get thermal injury directly to nerves with those devices. You have to be aware of the anatomy. The operating frequency of the radiofrequency devices is so high so that you do not stimulate inaction potential. You won't find the tools producing things like motor twitches.

Q: Are you familiar with smart liposuction? It peaked some interest in my office and I want to know if you have a response to that.

Anderson: I don't perform liposuction in my practice, so I don't want to discuss it too much. I believe that's done with a YAG laser. There have been several attempts to use lasers to assist liposuction. As you know, there is a lot of elbow grease that goes into that procedure. The joke is that the surgeon often loses more weight than the patient. Things that break the tissue up, such as the resonant piezoelectric ultrasound probe that was used initially, are a bit of a disaster because they cause a fair amount of skin burning, so maybe there's some merit to the idea of using the light.

Narurkar: I can comment on that. It's appropriate for very small areas of fat, such as the submental area or some very limited areas in the abdomen. It is performed with a long-pulsed YAG laser and it is not a noninvasive treatment. It's minimally invasive because you still have to insert the laser through an insertion point. I don't think it's a practical solution for large areas of fat, and whether it offers any advantages to traditional liposuction for small areas has yet to be proven. But again, there's the laser component associated with it, which of course appeals to a lot of patients, and they come in thinking that it's noninvasive when in fact it is actually an invasive procedure.

Q: What about Doris Hexsel's work using subcision for the treatment of cellulite, subcising the vertically oriented septae? What do you think about it?

Anderson: I think that is a good idea. There's an equivalent procedure for acne scars; you can subcise an acne scar. My personal clinical issue with the procedure is longevity of response, because usually you release the tension and then it reforms. However, I do not perform the procedure. I think we really need larger prospective, well-designed trials. The science behind our aesthetic and cosmetic treatments needs to be brought to a higher level. You obviously have to create a hole in the person to do the subcision, so it's a bit invasive.

Q: If you do get some hypopigmentation after hair removal, is there an interval that's safe to wait to re-treat for the next one, or is it something you should not treat again? I am referring to hypopigmentation that is hopefully transient that occurred after somebody was a little bit too tan.

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Hirsch: You want to let the patient dictate what you do next. Hypopigmentation tends to not always be that transient. It tends to be the more long-lasting of the complications, and I think you want to express great care and perhaps adapt your technique before proceeding. I tend to proceed with great caution when I see any evidence of hypopigmentation.

Ross: During the phase of hypopigmentation, particularly if it's early hypopigmentation that has not yet normalized, if it were going to normalize, I'd feel uncomfortable re-treating that patient because that skin would still be injured. I would want to give the patient every chance to repigment and I wouldn't want to interfere with the wound at that time. Theoretically, somebody could argue that you damaged some blood vessels and somehow impaired the healing during the second or third laser treatment. This is why I would wait for complete restoration of normal pigmentation or as close to complete restoration of normal pigmentation as possible before proceeding with additional hair treatments in that particular area.

Anderson: I've seen several cases of permanent hypopigmentation due to the cryogen spray device. It is usually seen after treatment with an alexandrite laser with the cryogen spray. If the spray is misaligned or if you simply hold the handpiece at the wrong angle, you get crescent-shaped, cryogen-induced hyperpigmentations. This is more common in darker-skinned patients; the person using the device turns the cryogen up appropriately to treat the patient with more pigmentation, but if it's misaligned or misused, the patient will develop permanent hypopigmentation. Those are tough cases. I'm really

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not sure you can do anything for those patients. It is a cryogen effect similar to that of liquid nitrogen.

Q: When do you decide to use the carbon dioxide laser versus the ablative Erbium:YAG laser without the long pulse?

Fitzpatrick: I always use the 2 together. The problem with the ablative Erbium:YAG laser by itself is that it causes bleeding that interferes with your ability to go deeper. You really cannot sculpt tissue in the same way with the Erbium:YAG laser by itself without the long-pulse aspect to heat the tissue and seal the vessels.

Q: In treatment of neck laxity with high radio frequency, is there any adverse effect on the thyroid gland or functioning of the thyroid gland?

Anderson: I would not expect to see that because the thyroid is fairly well protected, actually, but it's a great question. I'm not aware of anybody having looked.

Fitzpatrick: No one has ever reported it.

Anderson: Of course, you see what you look for. I'm not aware of anyone having done a detailed look. If you did damage the gland, you could probably expect a transient spike in T4 release because the gland is loaded with it.

Future issues of Cosmetic Dermatology® will include questions and answers from other programs presented at the ASCDAS meeting. For more information on ASCDAS, visit www.ascdas.org. ■