

Lasers in Skin Cancer Treatment

Podcast Audio Transcription

Opening

Welcome to Light Talk. A podcast series exclusively for members of the American Society for Laser Medicine and Surgery. Light Talk supports the mission of ASLMS which is to promote excellence in patient care by advancing biomedical application of lasers and other energy-based technologies world-wide. We hope you enjoy this edition of Light Talk with our host, Dr. Nazanin Saedi.

Discussion

DR. NAZANIN SAEDI

Hi, I'm Nazanin Saedi and I am here today with Dr. Anthony Rossi who is an assistant attending at Memorial Sloan Kettering Cancer Center. Anthony, thank you so much for joining us.

DR. ANTHONY M. ROSSI

Thanks for having me.

DR. SAEDI

So, Anthony, can you tell us a little bit about your research in using lasers to treat skin cancers? We often think of surgical options for our skin cancer patients, but how do lasers play a role?

DR. ROSSI

Sure so, you know, for certain patients who have early skin cancers like early superficial basal cell carcinomas, or squamous cell carcinoma in situ, some of these can be amenable to be treated with lasers instead of your traditional surgical approach. So, it's really important to understand which ones to select and which ones not to treat. Right? We don't want to treat very deep invasive, infiltrative basal cell with a very superficial laser because we will be missing the deeper component. But for these early lesions, and for patients who don't necessarily want to have surgery, treating them with a CO₂ laser which is what I have been doing, guided by confocal microscopy can really help us hone in on the areas that are positive and then ablate that tissue and then, which is really important, is follow up with them to make sure they aren't having any regrowth.

DR. SAEDI

Sure. And what kind of margins are you taking or what kind of parameter margins you are treating, I guess is a better way of asking it.

DR. ROSSI

Yeah for sure. So, with the confocal microscope, we can actually look at the parameter and look at those lateral margins, almost the way we look at things with MOHs surgery. So basically, the confocal microscope can penetrate down to 200 microns. So, you're going to get through the epidermis and into the papillary dermis and we can see islands of basal cells, either superficial or nodular, and then we can hone in where the tumor starts and stops and then use the laser accordingly.

DR. SAEDI

Great. And I know you are also doing some laser research treating patients who have been affected by cancer and treating the kind of bystanders of their cancer treatments, such as radiation dermatitis or striae developing from long-term corticosteroid use. Can you tell me a little bit about your work for those patients?

DR. ROSSI

Yeah so that's been great! It's really nice to see these patients and be a part of their treatments. So, we know from radiation, especially from breast cancer, a lot of women and some men, you know, will experience radiation dermatitis afterwards. So, they get many telangiectasias, over the radiated field. And this can really affect them psychosocially with their relationships or the way they dress. So, it's actually important to take note of that and make sure we are treating the whole patient and not just the disease. So, by using conservative treatment parameters with vascular lasers such as KTP laser or pulse dye laser, you can effectively clear those telangiectasias in a safe manner; even for patients who have been reconstructed with implants or have had extensive reconstruction otherwise.

DR. SAEDI

Great. Well thank you so much for joining us and thank you for sharing your expertise.

DR. ROSSI

Thanks!

Closing

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