SRT: Innovating a Proven Treatment for Skin Cancer Treatment

Innovating upon a tried-and-true technology, an updated device is available for dermatologists to use to fight skin cancer.

BY JEFFREY FROMOWITZ, MD

As a dermatologist in practice in Boca Raton, FL, I am at the front lines of the ever-growing skin cancer epidemic. As such, I am always searching for new tools that allow me and my practice to more safely and effectively treat our patients’ skin cancers. Nearly two years ago, we added an additional option in our practice: the SRT-100 from Sensus Healthcare.

The SRT-100 is a superficial radiotherapy (SRT) device that delivers precise, calibrated low-dose radiation that effectively destroys basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). Superficial radiotherapy and Orthovoltage, an X-ray-based technology that was first developed in the mid-1900s, were essentially created by dermatologists to safely treat oncological and non-oncological skin conditions—and in their heyday were present in more than half of dermatology offices across the nation.

As time went on, device manufacturers stopped innovating upon and supporting this technology; as a result, the machines broke down and the technology fell out of favor. Sensus Healthcare, recognizing the opportunity to innovate upon this tried-and-true technology, created an updated device for dermatologists to use that allows for consistency and predictable results when it comes to the treatment of non-melanoma skin cancer (NMSC) and keloids.

The SRT-100 device uses photons in the 50 to 200 peak kilovoltage range, which make this energy ideally suited for treating skin cancer, as it delivers its maximum energy at the skin’s surface and penetrates to a depth of approximately 5mm. The profile allows us a safe, effective, and predictable non-surgical alternative to treat non-melanoma skin cancer. It is an ideal choice for many of our patients who have significant comorbidities and in whom surgery can be high risk.

Traditionally, when treating non-melanoma skin cancer, Mohs micrographic surgery is seen as the go-to treatment. While Mohs or other surgical techniques remain first-line therapies, according to recent American Academy of Dermatology guidelines, the SRT-100 provides an alternative option that we have used to better treat certain patients with certain tumor types. For example, SRT has become our go-to treatment for (Continued on page 54)
“SRT has become our go-to treatment for anatomically difficult lesions, such as large basal and squamous cells on the shin, scalp, ear, and nose.”

To better illustrate the results of SRT treatment, I present an example of a case where SRT was the chosen treatment option. (See images, previous page) The patient was a 96-year-old woman with a three-month history of a non-healing ulceration on her left lower lip. She came to our office because the lesion had become increasingly painful and was bleeding, often interfering with her activities in daily life. A biopsy was performed and demonstrated a nodular ulcerated basal cell carcinoma with squamous differentiation. The patient also had a history of atrial fibrillation and was on blood thinners. Given the location, size of the lesion, patient’s age, and comorbid medical conditions, she wanted a non-surgical alternative to treat this skin cancer. The patient was concerned about the impact of surgery and the rehabilitation process, including a potential risk of bleeding or infection, and healing time.

As we discussed treatment options, she elected to treat this BCC with SRT. SRT treatments are delivered in multiple short sessions dependent upon the amount of energy needed for the total treatments, as well as the area being treated. To adequately treat this lesion, 12 treatment sessions were required. The actual time each session lasted was around 30 seconds. This patient received 12 fractions at 70kv and a dose of 380.6cGy per fraction. Photographs (previous page) show her at baseline, mid-way through treatment, and one month after the treatment was completed. As you can see, she had complete resolution of the basal cell—with outstanding cosmetic results. This patient shared our assessment and was pleased to have treated this skin cancer completely with a non-invasive approach sparing her the stress of surgery.

Jeffrey Fromowitz, MD, FAAD at Dermatology of Boca, Boca Raton, FL, uses the SRT-100 from Sensus Healthcare.

Be sure to read next month’s edition, with a look at another alternative intervention for NMSC treatment: Electronic brachytherapy (eBx). David Berman, MD writes about his experience.