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March/April 2016

SRT-100

A RELIABLE, EFFICIENT OPTION FOR KELOID TREATMENT

and conversion from a benign keloid to a fibrosarcoma, if it were to occur, would likely require many more years to develop, the authors of the report suggest that the initial lesions were likely not to be keloids and possibly fibrosarcomas.

Superficial radiation therapy is FDA approved for use following excision to reduce the recurrence of keloids. It is safe and effective and has a high level of patient acceptance. Many insurance carriers have covered this treatment for keloid patients. ■

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SUPERFICIAL RADIATION THERAPY FOR KELOIDS: AN EFFECTIVE TREATMENT WITH GLOBAL APPEAL

BY MICHAEL E. JONES, MD

Keloids represent a significant concern that affects patients globally. Individuals are deeply impacted by the condition and there is widespread demand for an effective treatment. The patient population comes to Lexington Plastic Surgeons from all over the world including Africa, Australia, and the Caribbean. We offer complimentary consultations in person, via telephone, through the Internet, Skype or even via email through a review of submitted photos. We advertise aggressively because we feel it is important to tell the world that there is a place that treats this dire problem.

Surgeons have not been inclined to take on the task of managing their patients' keloids due to low satisfaction rates and low cure rates. Surgery is a coin toss in terms of whether the keloid will recur. In the event that the keloid does recur, it often comes back even larger.

With Superficial Radiation Therapy, we have developed a protocol that is achieving a 95 percent success rate which we feel is very important to share with the international community. The gold standard, which used to be surgery followed by electron beam radiotherapy in a hospital setting only gets 70 to 75 percent success rate. Coordinating surgery with radiation therapy afterwards was a challenge. However, we now have an in-office protocol that allows us to do the surgery, do our intraoperative platelet rich plasma technique, and then follow that up with superficial radiation therapy for three days post operatively.

THE PROBLEM OF KELOIDS

So many of our patients come to us extremely distressed and overwhelmed that they've had keloids for years and it has affected their self-esteem and their way of life. They have had prior surgery—sometimes multiple surgeries—and even had radiation therapy already but are coming to us looking for some degree of hope, something that can salvage their self-esteem and improve their condition.

UNDERSTANDING TREATMENT

For over 15 years, we have been treating patients with hypertrophic scars and keloids. Lexington Plastic Surgeons is a practice that has an ethnic focus with cosmetic and reconstructive surgery performed on countless people of color. For years we have been experiencing the keloid problem in our patient base with a low treatment success rate. In the past we had used surgical incision and V-beam laser to try to thwart keloids or hypertrophic scars, with insignificant results. These methods were yielding only about a 50 percent success rate, sometimes causing those lesions and keloids to recur even larger. We started using

platelet rich plasma intra-operatively after we had removed the keloid which, looking back anecdotally at our patient population, seemed to increase the success rate from 50 percent to 60 percent. We then happened upon superficial radiotherapy, which was originally an in-office treatment developed for non-melanoma skin cancers. With the recent FDA approval for the use of this device in the treatment of keloids, we realized right away that we needed to have it as a part of our armamentarium to address the keloids and scars that can develop from the surgeries that we perform ourselves.

We are using radiation to treat the keloids because multiple studies have indicated that the hallmark for keloid care is surgical excision followed by radiation therapy. In the past, high-powered machines were used to deliver the radiation using electron beam therapy, or linear accelerators. Now with the use of superficial radiation we are able to deliver the same radiation dose in an office setting. The superficial radiation is only affecting the cells and the skin at the level that needs the treatment. The radiation does not pass through the body yet it affects the fibroblast cells that live in the superficial skin which produce the extra scar tissue and the collagen. The success of the protocol lies in the ability to offer the superficial radiation in-office, making it relatively easy for patients to obtain treatment.

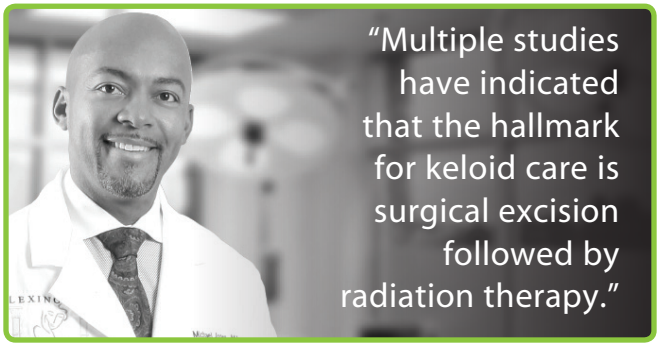
THE PROTOCOL

Our recently published treatment protocol involves extralesional excision of the keloid. Wherever possible, we are removing the keloid with a cuff of normal tissue around the keloid so that we can eliminate all of the diseased cells that are potentially leading to the collagen growth and the keloid itself. In the operating room we are elevating flaps to allow for a tension free closure. We will advance and rotate our skin flaps if necessary in order to obtain that tension free closure.

We use the fibrin platelet pore component of the PRP activated with thrombin to form a sort of tissue glue to allow those flaps to adhere to the subcutaneous tissue and then we will use the platelet rich plasma, activated or non-activated, under the skin flap in the incision and then on top of the skin.

Then, we close the wounds with monofilament absorbable sutures such as Monocryl; absolutely never use Vicryl in closing these incisions, as Vicryl sutures lead to far too much inflammation, which can potentiate keloid formation. We also use Dermabond and Steri-Strips to assist in wound closure on top of the platelet rich plasma that we have applied to the skin.

We treat these patients for three days, getting three fractions of superficial radiation therapy in the office subsequent to the incision. It is very important that radiation therapy be started within 72 hours of the excision, as most of the literature has stated, to get the best results for radiotherapy.



The adequate candidate for this approach is anyone with a keloid that is causing them significant pain; anyone that may have folliculitis that is draining puss; or anyone who is just bothered by their keloid in general. We are now investigating and have obtained an IRB for extreme keloids, those keloids that are so large that they cannot be removed surgically. We are experimenting with treating them with preoperative radiotherapy much in the way an oncologist would treat an non resectable tumor with radiation to try to get it to shrink to a small enough degree that it becomes amenable to surgical excision. This method has revolutionized the treatment of keloids and the success rate we can obtain.

A SIGNIFICANT RESPONSE

We have had significant response to our treatment with many patients giving us unbelievable testimonials as to how we have changed their lives. Patients often come back to see us in tears because they are now seeing their faces for the very first time. They've been riddled with keloids and are now finally feeling confident. Some no longer have to cover up because they may have a keloid on their face or neck. We feel really empowered by this, because it makes us feel like we are really making a difference in people's lives. Because of the success we have had at our New York City location, we have opened Keloid Treatment Centers in Washington DC area, Atlanta, Miami, and soon in Michigan.

We at Lexington Plastic Surgeons have embraced this technology and technique, and embraced these patients in such a way that we really want to make it accessible for them to get the treatment they deserve. ■

Michael E. Jones, MD, is board certified by American Board of Facial Plastic and Reconstructive Surgery and American Board of Otolaryngology-Head and Neck Surgery. He is Founder and Director of Lexington Plastic Surgeons with a flagship office located in New York City, as well as additional offices in Newark, New Jersey; metropolitan Washington, DC; Atlanta, GA, Miami, FL and Los Angeles.