

P8389

Case report of a rare side effect associated with cryolipolysis

Otávio Macedo, MD, Clínica Dr Otávio Macedo Ltda, São Paulo, Brazil; Claudia Beatriz Chaim, MD, Clínica Dr Otávio Macedo Ltda, São Paulo, Brazil; Luciana Matsumoto, MD, Clínica Dr Otávio Macedo Ltda, São Paulo, Brazil

Background: Cryolipolysis provides a method of noninvasive fat reduction that significantly reduces subcutaneous fat without injury to adjacent tissues. It is a noninvasive FDA-approved procedure that causes apoptotic fat cell death, reducing the thickness of the subcutaneous fat layer. Clinical studies have reported an approximated 20% reduction in the fat layer with a single treatment. Cryolipolysis, when used for reduction of subcutaneous flank fat or abdomen, is not associated with changes in serum lipids or liver test results.

Objective: Case report of 2 rare side effects: subcutaneous induration and paradoxical hyperplasia in a male patient treated for reducing subcutaneous fat in the abdominal area.

Case report: Male, 40 years old, 80 Kg, with no history of precedent disease or previous treatment of any condition, treated in the inferior abdominal area. The patient presented, as expected, mild erythema, edema, and decreased sensation during 10 days after procedure. After about 30 days, patient noticed improvement of the treated area with reduction of the fat tissue and a body contouring improvement. Two months after the procedure, patient reported a subcutaneous induration with painless increasing generalized firmness of the treatment area. The patient reported an enlargement confined to the treatment area with a nontender bulge with consistency firmer than the surrounding tissue that started at the third month after the procedure and continued until the fifth month. The patient reported there were no other side effects, such as numbness or pain. He had no gain weight and no changes in dietary habits. In this case, there were taken surgical measures, such as liposuction.

Conclusion: The subcutaneous induration is a rare side effect of cryolipolysis with an incidence rate of 0.0077% and the paradoxical hyperplasia has an incidence rate of 0.0032% with a strong trend to greater frequency in males. The onset of paradoxical hyperplasia is typically 2 to 3 months, but may occur up to 5 months posttreatment. In these rare cases reported in the literature, surgical measures including liposuction or abdominoplasty were performed. In the case reported, no demographic or medical risk factor for subcutaneous induration or paradoxical hyperplasia have been identified at this moment.

Commercial support: None identified.

P8416

Current evidence on recurrence rate of basal cell and squamous cell carcinomas treated by Mohs micrographic surgery: Systematic review

Majid Foroozan, MD, McGill University Health Centre, Montreal, Quebec, Canada; Alain Beauchet, MD, Department of Public Health, Ambroise Paré University Hospital, Boulogne-Billancourt, France; Elisa Funck-Brentano, MD, Dermatology Department, Ambroise Paré University Hospital, Boulogne-Billancourt, France; Jean-François Sei, MD, Dermatology Department, Ambroise Paré University Hospital, Boulogne-Billancourt, France; Philippe Saïag, MD, PhD, Dermatology Department, Ambroise Paré University Hospital, Boulogne-Billancourt, France

Introduction: Basal cell (BCC) and squamous cell (SCC) carcinomas are the commonest skin cancers. Numerous guidelines propose Mohs micrographic surgery (MMS) as an effective treatment. Our objective was to summarize evidence regarding recurrence rates after MMS in BCC and SCC.

Methods: We searched multiple databases from January 1995 to December 2012. Search terms were Mohs micrographic surgery, basal cell carcinoma, squamous cell carcinoma and their synonyms. Randomized controlled trials (RCT) or nonrandomized trials (NRTs) reporting recurrence rate of MMS in patients with primary or recurrent BCC and SCC were selected. Data were extracted by 2 coauthors independently. The methodologic quality was assessed using the Cochrane handbook for systematic review.

Results: The search retrieved 1089 references, of which 105 were reviewed in detail. One RCT and 17 NRTs were included. The RCT showed a statistically significant reduction of 5-year recurrence rate after MMS compared to standard excision for recurrent high risk facial BCC, but not for primary facial BCC. No RCT was found for SCC. Among NRTs, the mean recurrence rate after MMS varied from 0 to 7.1% for primary BCC, 0% to 10% for recurrent BCC, 2.6% to 4.5% for primary invasive squamous cell carcinoma and 5.9% to 23% for recurrent invasive SCC of the head and neck.

Conclusions: To the best of our knowledge, this is the most comprehensive systematic review on recurrence rates after MMS for BCC and SCC. Based on the current literature, only high-risk recurrent facial BCC had lower recurrence rate after MMS or similar surgical techniques with meticulous histologic evaluation of all margins. Because of the insufficient number of high-quality studies and heterogeneity of existing studies, we were unable to make a conclusion for other types of BCC and SCC. Our study illuminates the current status of literature on MMS and highlights the lack of high quality trials, particularly in SCC. Additional well-designed trials are needed. However, ethical concerns may prevent performing such studies.

Commercial support: None identified.

P7981

Novel treatment of extensive unilateral epidermal nevus with high-frequency electrosurgery and CO₂ laser

So Yeon Paek, MD, Henry Ford Dermatology, Detroit, MI, United States; David Ozog, MD, Henry Ford Dermatology, Detroit, MI, United States

Epidermal nevi are benign hamartomas which arise from embryonic ectoderm. They are frequently found in conjunction with other neurocutaneous findings and neurologic abnormalities, such as seizures and developmental delay, and may be considered as part of an epidermal nevus syndrome. Existing treatment options, which include topical retinoids, topical or intralesional steroids, topical calcipotriol, cryosurgery, and surgical excision, are not particularly effective. We describe treatment of an extensive congenital unilateral epidermal nevus on an otherwise healthy 19-year-old African American female by high-frequency electrosurgery and fractionated carbon dioxide laser. The physical examination was significant for hyperpigmented, thick, verrucous plaques extending from the right dorsal hand beginning at the dorsal fingers extending in a Blaschkoid distribution linearly onto the right arm proximally at the shoulder, right lateral neck, right posterior shoulder, upper back, right lower back, and finally onto the buttocks and right upper lateral thigh. Additional lesions were noted from the right shoulder to the right mid-chest. Total body surface area involved was >1000 cm². No asymmetry of limbs was noted, and the lesions were demarcated sharply to midline. No neurologic deficits or ocular lesions were identified. After select areas were anesthetized with 0.5% lidocaine with epinephrine, the verrucous surface of the epidermal nevus was planed down with a radiofrequency device (Ellman Surgitron) using a large round loop electrode on blended waveform (cut/coag) at a power setting of 4. Once this debulking was completed, additional resurfacing was performed with fractional CO₂ laser (Lumenis Ultrapulse) using superficial active FX settings of energy 150 mJ and density 4 (100% surface coverage). To our knowledge, the combination of high-frequency electrosurgery and fractional CO₂ laser for treatment of extensive unilateral epidermal nevus has not been reported. The main practical challenge of this modality is the significant treatment time for each small area (30-60 minutes). Our treatment area was 10-20 cm² of her large congenital nevus with total area >1000 cm². The potential also exists for scarring with either device with combined bulk heating. However, we present a potentially effective therapeutic option for these patients.

Commercial support: None identified.

P8507

Outcomes of keloid surgery: A 5-year retrospective review

Khor Jia Ker, MBBS, Khor Jia Ker, Singapore, Singapore; Wee Ping Tan, MBBS, Wee Ping Tan, Singapore, Singapore

Introduction: Various modalities have been used in the treatment of keloids, including intralesional steroid injection, surgical excision, and laser therapy. Success rates vary among different treatments. We aim to evaluate the outcomes of keloid treatment with excision and/or carbon dioxide (CO₂) laser in patients attending the National Skin Centre Singapore, a tertiary dermatologic centre, from 1 January 2007 to 31 December 2011.

Methods: Cases of keloids treated with excision or CO₂ laser from 1 January 2007 to 31 December 2011 were retrieved from the center's electronic medical records and analyzed.

Results: There were 146 patients, 116 females (79%) and 30 males (21%). The majority of patients were Chinese (66%), followed by Malay (16%), Indian (11%), and other races (7%). The mean age at presentation was 24 years old. Keloids were commonly located at the earlobes (42%), ear helices (27%), and anterior trunk (5%). They were caused by piercings (77%), followed by acne (3.4%) and surgery (3.4%). In our cohort of patients, the majority underwent CO₂ laser (79%) rather than excision surgery (16%) and the earlobes and ear helices were the most common treatment locations. About half of the patients received postsurgical intralesional triamcinolone (52%), 29% had no postsurgical treatment, 5% received radiotherapy, and 3% were prescribed topical silicone gels. Twenty-eight percent of patients treated with either excision or CO₂ laser had no keloid recurrence, 57% had partial recurrence, 8% had total recurrence, and 7% had a worse outcome. The median time to recurrence was 8 months, and the highest recurrence rates were seen on the shoulders, back, neck, and limbs. Recurrence rates were not affected by the different types of postsurgical adjunctive treatments. For patients who received postsurgical intralesional triamcinolone, the varying concentrations, numbers and frequencies of injections did not have an impact on recurrence rates. The mean duration of follow-up was 32 months postsurgery.

Conclusion: Female Chinese young adults with keloids on the ears caused by piercings form the majority of patients seen at our center. CO₂ laser was the most common surgical modality employed. Keloids on the ears appear to be most responsive to treatment with either excision or CO₂ laser but recurrence rates remain high, regardless of the type of postsurgical intervention.

Commercial support: None identified.