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## #231

**URTICARIA INDUCED BY LASER EPILATION: STUDY OF 36 PATIENTS—BRIEF: A CLINICAL AND HISTOLOGICAL ASSESSMENT OF 36 PATIENTS**

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**Background:** Laser epilation is currently one of the most common laser based procedures in the world. Although side effects are rare the most common are hyper or hypopigmentation. We describe a unique side effect consisting of delayed persistent urticarial rash after laser epilation.

**Study:** From January 2006 to March 2010, a total of 13,284 patients have laser epilation at our clinics. Of these 36 patients (35 women and one man) treated with Alexandrite laser, MiniGentle or GentleMax-Candela, developed a severe persistent pruritic urticarial rash 6–48 hours after the treatment within the treated skin. The eruption occurred most often on the legs or in the groin and only occasionally within the axillae. It consisted on multiple pruritic perifollicular papules and plaques. Most patients required oral corticosteroids to control the severe itching. Lesions resolved in 7–15 days without sequelae. The eruption occurred mostly on the first treatment and tended to recur in subsequent treatments. Pretreating patients with systemic corticosteroids helped to prevent or limit the eruption. Remarkably, all the patients but two reported allergic rhinitis or some other allergy in the past.

**Results: Description of Urticarial Rash:** The eruption occurred most often on the legs or in the groin and only occasionally within the axillae. It consisted on multiple pruritic perifollicular papules and plaques. Most patients required oral corticosteroids to control the severe itching. Lesions resolved in 7–15 days without sequelae. The eruption occurred mostly on the first treatment and tended to recur in subsequent treatments. Pretreating patients with systemic corticosteroids helped to prevent or limit the eruption. Remarkably, all the patients but two reported allergic rhinitis or some other allergy in the past.

**Histopathology:** Biopsies performed in three patients showed edema and a deep and dense infiltrate in mid and lower dermis consistent of lymphocytes mixed with eosinophiles in a perivascular pattern, and occasionally perifollicular.

**Discussion:** Rupture of the hair follicle by laser heat could trigger a hypersensitivity type I reaction in some predisposed allergic patients. An antigen derived from the disrupted hair follicle could be the triggering factor.

**Conclusion:** Persistent urticarial rash is a side effect of laser epilation which seems to happen in a subset of allergic patients. To prevent this side effect laser epilation should be preceded by an extended laser patch test done in a thick hair area. The result should be evaluated 48 later and preventive prednisone prescribed in those who develop a delayed, itchy and persistent urticarial rash on the test area.

## #232

**LASER LIPOLYSIS WITH A 980 NM DIODE LASER VERSUS TRADITIONAL AND ULTRASOUND ASSISTED LIPOSUCTION: PERSONAL EXPERIENCE****Tiziana Lazzari**

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**Background:** Since its advent in the 1970's to now the technique of liposuction has undergone continuous improvements and become a valuable security tool for the treatment of localized lipodystrophies. The purpose of this study was to evaluate the efficacy and safety of a 980 nm laser for laser-assisted liposculpture traditional and ultrasound assisted liposuction. Laser lipolysis is designed to provide selective adipose damage, while simultaneously facilitating fat removal, enhancing hemostasis and increasing tissue tightening.

**Study:** Sixty patients of both sexes (ranging in age from 25 to 55 years) with indications for liposculpture by showing the presence of localized fat on the abdomen, flank, trochanteric region and knees were selected for the treatment of laser-assisted liposculpture. After the tumescent anesthesia this technique involves an incision of 1 mm to introduce a tube about 1 mm in diameter and 15 cm in length through which is inserted into a fiber of 600  $\mu$ m. The laser pulse is set to continue from 5 to 18 W. The emitted energy varies from 2000 to 10,000 J per area. Laser application is followed by the aspiration of adipose tissue zone.

**Results:** In all 60 patients we have achieved good results without major complications.

**Conclusion:** Following a correct methodology, the laser-assisted liposculpture performed by laser 980 has proved a reliable and efficient technique for the surgical reshaping of the body. Although laser lipolysis is not intended to replace traditional liposuction or ultrasound assisted liposuction, it offers to the patients a procedure that achieves similar benefits with fewer complications and faster recovery.

## #233

**INTENSE PULSED LIGHT AND LOW-FLUENCE Q-SWITCHED ND:YAG LASER ELICITS MORE RAPID CLINICAL IMPROVEMENT IN ASIAN PATIENTS WITH MELASMA**

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**Background:** Recently low fluence collimated Q-switched Nd:YAG laser has drawn considerable attention for the treatment of melasma in Asian patients. However, it needs a lot of treatment sessions to achieve substantial clinical effects. This study was performed to see if there are any beneficial effects with the combinational treatment using intense pulsed light (IPL) and low fluence Q-switched Nd:YAG laser over laser treatment alone.

**Study:** Retrospective case series of 35 female patients with mixed type melasma were analyzed using medical records. Patients in group A were selected when IPL and consecutive four times of low fluence Nd:YAG laser treatments were applied. The patients who were treated successively with only laser every week were grouped into B. At every visit before and after the treatment, digital photographs were taken under the same condition. Erythema and melanin index was measured on the highest point on cheekbones. Modified MASI scores before and after the last treatment were marked using photographs by two investigators.

**Results:** In both groups, the mean values of MI and EI decreased significantly in comparison with baseline but *P*-values were lower in group A (EI: *P* = 0.000 vs. *P* = 0.047, MI: *P* = 0.000 vs. *P* = 0.0004). There was a statistically significant difference