Clinics Review Articles

CLINICS IN PLASTIC SURGERY

Local Anesthetics for Plastic Surgery

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Breast Surgery Under Local Anesthesia

Second-stage Implant Exchange, Nipple Flap Reconstruction, and Breast Augmentation

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KEYWORDS

• Breast reconstruction • Local anesthesia • Nipple • Areola • Nipple-areola complex (NAC) • Star flap • Implant exchange • Silicon breast implant

KEY POINTS

- Local anesthetic as an alternative to general or monitored anesthesia care (MAC) has been used for the past 30 years.
- Several health risks associated with general anesthesia/MACs are not present with local sedation, providing a safer option for the patient as well as the surgeon.
- When attempting to perform surgery under local anesthesia, consider the patient's desires and tolerance to being awake for the procedure. If anxiety is associated with the procedure or the needle, intravenous sedation is added to the anesthetic plan. A neurologic assessment of the breast mound area is performed, evaluating for light touch and pressure as well as pain.
- The star flap and the tattoo method for nipple-areola complex reconstruction, in conjunction with the Keller Funnel sizer to tissue expander exchange to silicon implant performed under local anesthesia, allow a single-site wound and minimal stress, time, and financial burden to the patient, but provide optimal aesthetic results and psychological benefits.

INTRODUCTION

As of 2011, more than 93,000 patients were undergoing breast reconstruction. Of those 93,000 patients, two-thirds of the procedures were implant based.[1] More than 60,000 of these patients were postmastectomy breast reconstructions.[2]

Implant-based reconstruction is more frequently performed in 2 stages, with the first tissue expander stage performed immediately after the mastectomies. Results for implant reconstruction have become reliable and have even improved in the setting of radiation therapy in certain instances.[3] Although performing the first stage of reconstruction usually requires general anesthesia, the second stage seems more amenable to performing the procedure under local anesthetic, which can be performed with small incisions with the techniques to be described in this article. Breast augmentation, which is more involved compared with second-stage breast implant reconstruction, has been shown to be performed successfully under local anesthetic.[4]

Reconstruction of the nipple-areola complex (NAC) is most frequently associated with breast cancer and, consequently, mastectomies, and it is also indicated in burn or trauma deformities, complications of reduction mammaplasties, and congenital or developmental disorders.[5] Increase in case

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EISEMANN PLASTIC SURGERY CENTER

LASER RESURFACING

The face ages in three ways 1. The skin looses volume by fat loss causing relative facial deflation 2. The skin looses elasticity and stretches with gravity creating deep melolabial and nasolabial folds and lines. 3. The skin deteriorates by ultraviolet sun exposure and inflammatory reactions as seen in acne scarring. Laser resurfacing treats the deteriorated skin which has mild, moderate or severe lines and wrinkles, sun spots, age spots, broken blood vessels and smoker and's lines around the mouth and crow's feet around the eyes.

Fractionated ablative lasers generate heat which creates new collagen in the deeper layers of the skin..These lasers such as the carbon dioxide laser is an ablative laser which treats certain areas but leaves untreated other areas which help to expedite healing and reduce prolonged redness. This laser is the most effective of all resurfacing lasers but does require topical anesthesia or IV sedation. The final results are judged in 6 months since the treatment stimulates collagen production .Smoking and diabetes are known inhibitors to wound healing. Some wound oozing lasts 3-5 days but prolonged redness can last 2 months depending on the calibrated depth of treatment desired. Risks of this procedure including hypopigmentation where there is loss of melanin seen in more darkly pigmented skin types, postinflammatory hyperpigmentation and (PIF) most commonly seen in Asian and Mediterranean populations, and scarring which is rare.

Viral prophylaxis is given preoperatively to prevent fever blisters or herpetic infections in those who are susceptible

Contraindications to laser resurfacing include #1. ACCUTANE usage in the past 12 months. Sebaceous glands are inactivated by the Accutane. These glands are beneficial for wound healing.#2 Autoimmune diseases such as lupus or scleroderma.

There are trade-offs between the results and downtime. A more effective and lasting result will require more downtime to heal. Multiple treatment sessions can be spaced apart to reduce the downtime. The results usually last 1 to 2 years.

Pricing is determined by the time necessary to treat, complexity of the condition being treated, extent of area treated, and surgical and anesthetic costs. A consultation with Dr. Eisemann is necessary since there is a large range in costs with this procedure for any given patient. 713-790-1771