Introduction

The cosmetic surgery patient is not like a typical "elective" surgical patient[1]. A patient having surgery for a medical condition is most concerning about getting better. In contradistinction, a cosmetic surgery patient will tend to be highly critical of every aspect of care pre-operatively, intra-operatively and post-operatively, in addition to the achievement of the desired cosmetic result.[2, 3]

Preanesthetic evaluation of the surgical patient is the first duty of an anesthesiologist to a patient. [1] There are six interrelated goals of preanesthetic evaluation. The first is to assess health and ensure physical readiness for anesthesia-requiring procedures. The second is to devise a mutually agreeable anesthetic plan and to educate the patient about it. The third is to reduce the psychological and physiological consequence of anxiety. The fourth is to plan postoperative care and pain therapy. The fifth is to coordinate patient care in a way that decreases total cost and improves outcomes. The sixth is to obtain informed consent for anesthesia. [1, 4]

In the course of seeking cosmetic surgery, many patients receive general inhalational anesthesia, total intravenous anesthesia (TIVA), regional anesthesia or local anesthesia in hospital surgi-center and office-based setting. [1]

An ideal general anesthetic technique should provide smooth and rapid induction, optimal operating conditions and a rapid recovery with minimal or no side effects. Halogenated inhalational anesthetics are

triggering agents for malignant hyperthermia (MH) and are emetogenic. [1, 4]

TIVA relies on hypnosis augmented by the addition of analgesics and muscle relaxants. [5] A sedative/hypnotic such as propofol will provide only unconsciousness and/or amnesia. Dissociative agents (e.g. ketamine) and/or opioids will provide systemic analgesia.[6] TIVA is safer than inhalational anestheia and doesn't require bulky, heavy and expensive anesthesia machines. [1, 5]

Regional anesthesia which includes both central neuroaxial techniques as well as peripheral nerve blocks has broad application for cosmetic surgical procedures. [7] They can facilitate successful cosmetic surgery and result in positive patient outcome with high patient satisfaction. [1, 7]

When possible, procedures longer than three or four hours should be performed with local anesthesia and intravenous sedation. [8] Newer techniques for intravenous sedation that include the use of Propofol in combination with other drugs have made it possible to perform these lengthy procedures without loss of patient airway protective reflexes. [8, 9]

Minimally invasive anesthesia (MIA); the least amount of anesthetic that can be used is the best dose. [1] The bispectral index (BIS) monitor facilitates a numerical expression of the hypnotic component of the anesthetic state and may permit a reasonable inference about the anesthetic state. The scale is 0-100, with 100 representing awake and zero representing isoelectric brain activity. Hypnosis compatible with general anesthesia (GA) occurs between BIS 45-60. BIS 60-75 with adequate local analgesia is a major part of the MIA technique. [10]

The anesthesiologists concluded that pain was the number one anesthesia outcome patients most desired to avoid. [11] A follow-up survey of patients' anesthesia outcomes they most desired to avoid was emesis. [12]

Post-operative local analgesia is achieved by using a long acting local anesthetic, such as Bupivicaine, in the operative field before closing. Alternatively, placing a continuous infusion of local anesthetic post-operatively will minimize, if not eliminate, the requirement for opioids. [11, 13]

Patients receiving general anesthesia had an eleven fold increase in risk for post-operative nausea and vomiting (PONV) compared with those receiving regional anesthesia. [14] The most effective strategy for these patients is to make certain they are well hydrated, avoid volatile agents and avoid opioids. [14, 15]

Outpatient surgery is an important aspect of plastic surgery. [3] It was shown that office-based surgery with intravenous sedation, performed by board-certified plastic surgeons and nurse anesthetists, is safe. [16] Appropriate accreditation, safe anesthesia protocols, and proper patient selection constitute the basis for safe and efficacious office-based outpatient plastic surgery. [1, 16]