RESEARCH LETTERS

Influence of Botulinum Toxin A Injection in the Practice Management of Facial Plastic Surgery

According to the 2005 analysis report from the American Society of Aesthetic Plastic Surgery, injection with botulinum toxin A (Botox; Allergan Inc, Irvine, Calif) is the most frequently performed cosmetic procedure in the United States, taking into account both surgical and nonsurgical treatments. This injectable agent has gained such popularity because of its positive predictable effects and because the procedure can be performed quickly, safely, and with minimal to no downtime for the patient. However, an important question is often posed by aesthetic surgeons: “What role does Botox have in a surgical practice?”

In our experience, Botox treatments, like other minimally invasive techniques, can play a positive gateway role for up-and-coming aesthetic surgeons trying to develop the surgical component of their practice. We have found that offering Botox treatments affords the young aesthetic surgeon the opportunity to provide a service that is safe and effective, and thereby, the means to gain a patient’s trust for the times when surgical measures are indicated or desired. Our study objective was to review the records of the senior author (S.D.) from his first 5 years in practice to determine what percentage of his patients who were seen for surgical rejuvenation began as clients who received treatment with Botox.

Methods. A retrospective medical chart review was conducted at the Dayan Facial Plastic Surgery Center (Chicago, Ill) to identify all patients who had undergone a surgical rejuvenation procedure (rhytidectomy, forehead-lift, blepharoplasty, submental liposuction, or neck-lift) during the senior author’s first 5 years of practice (November 1999 to November 2005). The number of individuals among this group who had been treated with Botox was subsequently calculated, separating the patients who had been treated with Botox prior to surgery from those who had been treated after surgery.

Results. A total of 225 patients underwent a facial rejuvenation surgical procedure: 34 (15%) were male, 191 (85%) were female, and the mean patient age was 53 years. Of these 225 patients, a total of 103 patients (45.7%) had received Botox treatment; of these patients, 51 (22.6%) received Botox treatment prior to surgery, whereas 52 patients (23.1%) received Botox treatment after surgery. The mean age of patients receiving Botox treatment was 50 years; 12 (11.1%) of the 103 patients were male. The mean number of treatments per patient was 3.47, with a total number of injections of 358.

Comment. Our study objective was to investigate the hypothesis that providing treatment with Botox injection can play an important gateway role in developing the surgical component of an aesthetic practice. We found that nearly half (45.7% [103 patients]) of the 225 patients who underwent surgical facial rejuvenation also had been treated with Botox at some point in the first 5 years of the senior author’s practice. Interestingly, our data seem encouraging for the novice surgeon starting a new practice as well as for the seasoned professional trying to improve patient retention. Not only did a large percentage (22.6%) of our patients who were treated with surgical rejuvenation initially start out as clients who were treated with Botox, but a similar percentage (23.1%) of patients who underwent a surgical procedure sought Botox treatment following surgery.

With physical appearance having a greater importance in modern society, a growing number of individuals are seeking “a small touch-up” to improve their self-esteem and confidence in social and professional settings. Despite this trend, however, patients are often reluctant and fearful of surgical options, particularly in the hands of a novice surgeon. Candidates for surgical rejuvenation are generally mature, making it difficult for the younger physician to gain their confidence to perform an elective, invasive procedure. However, for nonsurgical options, the comfort level is generally much higher. Interestingly, in our study, we found that the mean age of patients undergoing surgical rejuvenation (53 years) to be very close to the mean age of patients receiving Botox treatment (50 years). This demographic overlap is encouraging for the young facial plastic surgeon because injectable treatments such as Botox can provide an opportunity to gain the trust of potential surgical patients, who initially present to the office seeking these less invasive rejuvenation options. These apprehensive individuals will be more likely to seek a younger surgeon’s care for surgical measures, when later warranted or desired, with the comfort of an already established relationship in place. We, as aesthetic surgeons, have an advantage over many other medical professionals in that we can offer both surgical and nonsurgical treatments. By offering a comprehensive set of therapeutic options, the young cosmetic surgeon is able to provide continuity of care to the patient, and at the same time, develop a surgical practice.

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Efficacy and Safety of Endotine Fixation Device in Endoscopic Brow-Lift

A variety of techniques have been described for fixation of the brow-lift. The Endotine forehead device (CoApt Systems Inc, Palo Alto, Calif) is an implantable bioabsorbable fixation device designed to provide multipoint distributed tension for fixation during brow-lift in a rapid manner. It is intended to provide the surgeon with unique flexibility in both the degree of fixation and vectors of pull. In addition, it is designed to allow for re-fixation during the procedure to make adjustments to brow position. Herein, I report retrospectively the cases of 31 consecutive patients who underwent endoscopic brow-lift using the Endotine forehead fixation system.

Methods. The surgical technique has been described elsewhere. Patients scheduled for endoscopic brow-lift were evaluated with standardized photographs taken preoperatively, again at 1 to 3 months after surgery (hereinafter, early postoperative photographs), and finally after a minimum of 6 months after surgery (hereinafter, late postoperative photographs). The degree of brow elevation was measured bilaterally at the midpupillary line and lateral canthus, as previously described by Sidle et al. Standardized measurements were obtained within the prescribed early and later postoperative periods in 14 patients. Measurable loss of elevation from the early to the late postoperative periods was seen in 28 of 56 measurement points (left and right lateral canthi, left and right midpupillary). The amount of brow descent shown in the early postoperative photographs compared with the later ones at each of these points ranged from 0 to 2.4 mm. The average descent of the measured points was 0.65 mm.

Patient satisfaction was high. Self-reported questionnaires were obtained from 22 patients. Three reported having some tenderness of the implants. One found the palpable nature of the implants bothersome. All patients reported being very satisfied with the procedure.

Comment. I have found the Endotine system to be quite effective, safe, quick, and easy to use. The fixation is well maintained over time. A key advantage is the ability to adjust the brow position and contour during the procedure.

Results. Thirty-one consecutive patients who underwent endoscopic brow-lift with the Endotine brow fixation devices were included in the study. No surgical complications occurred. One patient reported mild tenderness to palpation at the site of 1 Endotine device that persisted for approximately 3 months after surgery. A revision was planned for 1 patient, who experienced lack of fixation of 1 brow in the immediate postoperative period.

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Figure 1, Method of brow elevation measurements. The distance from standard reference points, in millimeters, recorded bilaterally. A, Preoperative measurements. B, Early postoperative measurements. C, Late postoperative measurements.