

Better Sex From the Knife? An Intimate Look at the Effects of Cosmetic Surgery on Sexual Practices

Guy M. Stofman, MD; Timothy S. Neavin, MD; Praful M. Ramineni, MD; and Aaron Alford, MD

Dr. Stofman is Chief of Plastic Surgery, The Mercy Hospital of Pittsburgh, and Clinical Associate Professor of Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA. Dr. Neavin and Dr. Ramineni are surgical residents at the University of Pittsburgh School of Medicine. Dr. Alford is a surgical resident at The Mercy Hospital of Pittsburgh.

Background: *The positive effects of aesthetic plastic surgery with respect to body image and self-esteem have been reported in the literature. However, the possible effects of aesthetic surgery on the sexual practices and characteristics of patients have been largely unexplored.*

Objective: *This paper seeks to examine the degree to which a major aesthetic procedure affects the patient's postoperative psychosexual life.*

Methods: *An anonymous questionnaire regarding preoperative versus postoperative psychosexual health and sexual behaviors was mailed to 330 male and female patients who had undergone a major aesthetic procedure by the senior author (G.M.S). Major procedures were defined as breast augmentation and/or mastopexy; facial aesthetic surgery, including face lift, brow lift, and rhinoplasty; and body contouring procedures, including abdominoplasty with or without lipoplasty, or lipoplasty alone.*

Results: *Of the 330 surveys mailed out, 54 were returned as undeliverable. Seventy completed surveys were returned. All the respondents were women, with a mean age of 38 years. More than 95% of respondents reported improvements in body image. Eighty percent of breast augmentation respondents and 50% of body surgery respondents declared improvements in sexual satisfaction. Fifty percent of breast and 60% of body respondents had changed to more provocative attire. Approximately 70% of the breast and body group testified that their partner's sex life had been enhanced. More than 30% of breast patients and 50% of body patients reported an enhanced ability to achieve orgasm. When body and breast respondents were compared with face surgery respondents, statistical significance ($P < .01$) was found among most psychosexual variables investigated.*

Conclusions: *The results of this study affirm that cosmetic surgery patients overwhelmingly tend to feel better about their body after surgery. The sex lives of both patients and their sexual partners can be strikingly enhanced after elective cosmetic surgery, particularly if the surgery is focused on the breasts, abdomen, and thighs. (Aesthetic Surg J 2006;26:12-17.)*

Aesthetic plastic surgery is no longer a luxury restricted to celebrities and the extremely wealthy. More than 11 million cosmetic procedures were performed in 2004, including more than 475,000 lipoplasty procedures, 334,000 breast augmentations, 176,000 rhinoplasties, and 150,000 abdominoplasties, according to ASAPS 2004 statistics.¹ This represents a more than fourfold increase in procedures overall from only 8 years ago.

Aesthetic surgery has not only become "mainstream" in the United States but also has developed into a cultural phenomenon exploited by mass media. "Extreme Makeover," "The Swan," and "Dr. 90210" are some of the more popular reality television shows highlighting cosmetic surgery, and national advertising for a host of

beauty or "anti-aging" products plays off the popularity of cosmetic surgery.

It is also clear that for cosmetic surgery patients, beauty is indeed more than skin deep. The literature suggests that self-esteem and body image levels are high in "attractive people."^{2,3} Studies also indicate that positive outcomes from surgical modifications to the body and face can truly alter one's life,²⁻⁹ to the extent that the plastic surgeon is sometimes labeled a "psychosurgeon" because of the effects of a positive outcome on the patient's psychological development. In their quality-of-life outcome studies, Rankin et al⁸ demonstrated that after cosmetic surgery, patients are more self-confident, more satisfied in their appearance, and demonstrated increased psychological well-being.

They reported positive changes in their social lives, sex lives, and interpersonal relationships. Patients also enjoyed more leisure activities. The authors reported that patients have lower depression scores after cosmetic surgery. Bolton et al⁹ asked the question, “Does abdominoplasty affect body image function by reducing negative body image evaluations and dysphoric body image emotions?” By using various body image questionnaires and evaluations, they concluded that after abdominoplasty, body image improved, exposure avoidance experiences during sex decreased, and self-consciousness declined. Goin and Rees¹⁰ showed that in psychologically stable patients, rhinoplasty reduced self-consciousness, anxiety, and interpersonal sensitivity, and could increase self-esteem. It has been noted that self-consciousness about the mid torso and other weight-sensitive areas of the body can erode sexual satisfaction and functioning.¹¹ However, the possible effects of body-enhancing surgery on sexual practices and characteristics have been largely unexplored. The purpose of this paper was to explore this intimate relationship and expand the literature on the psychosexual dynamics of human sexuality inherent in positive plastic surgery results.

Patients and Methods

A 3-page postal questionnaire was developed to investigate whether or not patients perceived changes in their psychosexual health and habits after undergoing a major elective cosmetic procedure. The questions (see sidebar) dealt with pre- and postsurgical frequency of sexual encounters, modifications in attire postoperatively, body image perception changes, personal and perceived partner sexual satisfaction, change in willingness to experiment sexually, and ability to achieve orgasm. Additional questions concerning pre- and postsurgical exercise frequency, occupation changes, and friend and family dynamics were included in the questionnaire, but are beyond the scope of this investigation and will not be taken into consideration here.

Questionnaires were mailed to the last 330 adult male and female patients who had undergone a “major” elective cosmetic surgical procedure by the author (G.M.S.) between January 2001 and December 2002. “Major” cosmetic procedures included breast augmentation mammoplasty and/or mastopexy; facial rejuvenation procedures, including face lift, brow lift, and rhinoplasty; body contouring, including abdominoplasty with and without lipoplasty, or lipoplasty alone. Patients who had undergone breast reduction, minor

cosmetic surgeries, and general reconstructions were excluded from our initial patient survey pool. A letter that accompanied our questionnaire described the intentions of our investigation while stressing the anonymous nature of each questionnaire.

Of the initial 330 surveys mailed, 54 were returned as undeliverable, mainly because of address changes. Over the course of the following 4 weeks, 70 anonymously completed surveys were collected, representing a 25% participation rate. Of this collection, 100% were female. The median age range of patients who responded was 33 to 44 years. Demographics, including marital status and ethnicity, were not explored.

Data were analyzed using 2 different paradigms. First, to incorporate such a vast variety of major elective cosmetic surgeries, 3 groups were devised: breast (BR) (n = 26), body (BO) (n = 25), and face (F) (n = 19). Of the BR group, 25 (96% underwent breast augmentation; 1 patient underwent mastopexy without breast reduction. Patient ages in this group ranged from 26 to 40 years. The BO group comprised 20 participants, most of whom were in the 41- to 50-year age range, although several patients 17 to 25 and over 60 years of age were included. Of this group, 20 (80%) underwent abdominoplasty with or without adjunctive lipoplasty, 4 underwent combinations of thigh and waist lipoplasty, and 1 underwent labia reduction. Of the face group, 5 participants (26%) underwent rhinoplasty, whereas the other 14 (74%) underwent combinations of face lift with and without lid and brow rejuvenation procedures. Not surprisingly, patients in this group were somewhat older, with most aged 51 to 60 years.

It has previously been reported that augmentation mammoplasty may positively affect a patient’s desire to have sexual intercourse, increase sex quality and frequency, and help achieve orgasm, while also improving self-image and self-confidence.³ Given the premise that body altering procedures could in fact improve one’s self-image, we hypothesized that psychosexual alterations from elective cosmetic surgery would be most influenced by “body” surgeries, that is, breast augmentation, abdominoplasty, and lipoplasty. To investigate this idea more precisely, 2 groups were thus developed. The BO group in this analysis was expanded to include the 26 breast procedures from the BR population. Our F group was not modified. The more inclusive body group (EB) was then compared to our F group among multiple variables as outlined in the Table using chi-square analysis.

Results

Intra-group analysis of breast, body, and face

The patients were originally divided into 3 groups as discussed previously. Of the BR group, 12 of 26 respondents (46%) reported increased sex frequency after surgery. No one declared a reduction in sexual encounters or frequency of sex postoperatively. Twenty-five of 26 (96%) reported an increase in body image satisfaction, with 11 of 26 (42%) changing from “desire for significant improvement” preoperatively to “completely” or “near completely” satisfied with body image postoperatively. Fourteen of 26 (54%) modified their attire postoperatively to dress more provocatively. Ten of 26 (39%) reported they willingly experiment sexually more often and achieve more comfort in new sexual positions. A remarkable 21 of 26 (81%) declared a significant improvement in sexual satisfaction after surgery, and 19 of 26 (73%) reported perceived improvements in their partner’s sexual satisfaction. Eight respondents (31%) claimed their ability to achieve orgasm had improved. All but 3 (88%) participants noted a marked increase in compliments related to their postoperative outcome. With the exception of 1 participant, all BR group patients said they would have the surgery again.

In the BO group, only 5 of 25 (20%) reported having more frequent sex postoperatively. However, 13 (52%) were enjoying more sexual experimentation (loosely defined as “more sexual positions” and/or “unconventional sex”), 17 (68%) declared a marked improvement in sexual satisfaction, 14 (56%) perceived improvements in partner sexual satisfaction, and 13 or 52% achieved orgasm more easily postoperatively.

Not unexpectedly, all but 1 participant in this group had an improved body image postoperatively. If this category is examined more closely, we find that 15 (60%) reported an increase in body image satisfaction, changing from “desire for significant improvement” preoperatively to “completely” or “near completely” satisfied with body image postoperatively and, likely as a consequence of an improved body image, wearing more provocative skin-revealing clothes. Twenty-one (84%) noted a marked increase in body compliments, and all but one would willingly undergo the same procedure again.

Among the F group, only 4 of 19 respondents (21%) reported having more frequent sex postoperatively. One (5%) was experimenting sexually more frequently, 6 (32%) reported an increase in sexual satisfaction, 4 (21%) perceived an increase in partner sexual satisfaction, and only 1 (5%) noted an improved ability to

obtain orgasm. Psychosocially, 18 (95%) had improved body image; 2 (11%) were wearing more provocative clothing postoperatively, and 16 (84%) would repeat the surgery. Results are summarized in the [Figure](#).

Expanded body versus face analysis

After an initial investigation of responses from BR, BO, and F participants, it was apparent that psychosexual and psychosocial differences existed between the F group and the BR and BO groups. Intragroup analysis demonstrated profound pre- and postoperative psychosexual and psychosocial alterations affecting respondents, especially among BR and BO participants. This is not surprising. Previous literature has supported the idea that breast augmentation could have a positive impact on sexual relations and body image.⁶

As a result of our observations and the previous study by Baker et al,⁶ we decided to compare BO participants with F participants, hypothesizing that body procedures will *generally* correlate more positively with improvements in psychosexual and psychosocial arenas postoperatively. The 70 participants were divided into 2 groups. Group 1 comprised an expanded body population (EB) in which all BR group participants and BO group participants were collected ($n = 51$). The F group ($n = 19$), which included patients who had undergone a combination of rhinoplasties and variety of facial rejuvenation procedures, remained unmodified. Chi-square analysis was performed and results are outlined in the Table.

Although 33% of EB participants versus 22% of F participants reported increase in postoperative sexual activity, the distribution is not significant. That is, there is no statistical evidence to support the idea that persons undergoing body surgery will, as a result of their body surgery, engage in sex more frequently postoperatively than those who have had facial surgery. Examination of personal sexual satisfaction responses demonstrates that 73% versus 37% of EB and F groups, respectively, reported an increase in postoperative surgical sexual satisfaction. This difference is statistically significant ($P < .01$). A similar trend was found when exploring partner sexual satisfaction; 67% versus 37% of EB and F participants, respectively, noted a perceived improvement in partner sexual satisfaction as a result of their body surgery. This is also statistically significant ($P < .01$). Additionally, there was a statistically significant difference between the EB and F groups with respect to postoperative ability to achieve orgasm (39% of EB group versus only 6% of F group reported increased ability, $P < .01$). When questioned about willingness to engage in unconventional sex, 41% of EB participants versus only

Table. Expanded chi-square analysis: body versus face

| Category | Change (%) after body surgery | Change (%) after facial surgery |
|---|-------------------------------|---------------------------------|
| Wear provocative clothing ($P < .01$) | | |
| Same | 45 | 88 |
| Increase | 55 | 12 |
| Personal sexual satisfaction ($P < .01$) | | |
| Same | 27 | 63 |
| Increase | 73 | 37 |
| Partner's sexual satisfaction ($P < .01$) | | |
| Same | 33 | 63 |
| Increase | 67 | 37 |
| Ability to have orgasm ($P < .025$) | | |
| Same | 62 | 94 |
| Increase | 38 | 6 |
| Use of unconventional sexual positions ($P < .025$) | | |
| Same | 59 | 94 |
| Increase | 41 | 6 |

Psychosexual Questions From Mailed Survey

Approximate sexual encounters before surgery per month: _____

Approximate sexual encounters after surgery per month: _____

Please rate how you feel about your body, 1 to 5, before the above cosmetic surgical procedure: (1=unsatisfied, 3=neutral, 5=very pleased) _____

Please rate how you feel about your body, 1 to 5, after the above cosmetic surgical procedure: (1=unsatisfied, 3=neutral, 5=very pleased) _____

How would you describe your sex life/sexual satisfaction since your cosmetic surgical procedure? (Less satisfied, no change, more satisfied) _____

How would you describe your partner's sex life/sexual satisfaction since your cosmetic surgical procedure (Less satisfied, no change, more satisfied) _____

How would you describe your willingness to sexually experiment or participate in unconventional sexual activity since your surgery (Less willing, no change, more willing) _____

How would you describe your ability to achieve orgasm since your cosmetic surgical procedure? (More difficult to achieve, no change, more easy to achieve) _____

6% of F participants reported postoperative changes, a statistically significant difference ($P < .025$).

Both EB and F groups demonstrated remarkable improvements in body image (92% and 95%, respectively). With respect to postoperative changes in attire, a remarkable 88% of the EB group versus only 12% of the F group stated that they were wearing more revealing clothes (“showing more skin”). This difference is statistically significant ($P < .01$) and somewhat intuitive.

Discussion

Thirty years ago, Baker et al⁶ published a comprehensive article on the psychosexual dynamics of women undergoing breast augmentation. It demonstrated the positive influence augmentation mammoplasty had on building self-confidence, sexual relations, and psychosocial health. Baker and colleagues demonstrated that after breast augmentation, many women found more pleasure in breast play and sexual intercourse; 13% of patients even reported their ability to achieve orgasm was enhanced. Many spouses were pleased with their wives’ cosmetic outcomes, leading, in many cases, to more frequent sexual relations. He also noted that clothing styles became more provocative and that an improved feeling of sexual adequacy was achieved among his patients.

We have confirmed these profound psychodynamic alterations in our participant pool. Furthermore, we have expanded on Baker’s study to investigate potential sexual influences resulting from multiple body procedures and compared the results with those from a facial surgery group. Body image was enhanced in 96% of BR group, 91% of the F group, and 60% of the BO group. Following surgery, over half of the participants in the BR and BO groups changed their attire to dress more provocatively.

Psychosexually, postsurgical changes were most profound among BR and BO participants. Most striking was the postoperative influence on sexual satisfaction, partner satisfaction, and ability to achieve orgasm. Approximately one half and one quarter of the BR group and BO group participants, respectively, reported engaging in sex more frequently after surgery. More than 80% and 50% of BR group and BO group participants, respectively, declared an improvement in their sex life after plastic surgery. In addition, more than 30% of BR and 50% of BO participants reported enhanced ability to achieve orgasm. Many of these women indicated that they felt more comfortable with unconventional sex and often engaged in more sexual positions.

It is important to note that only women responded to our survey; therefore, we do not have data from male

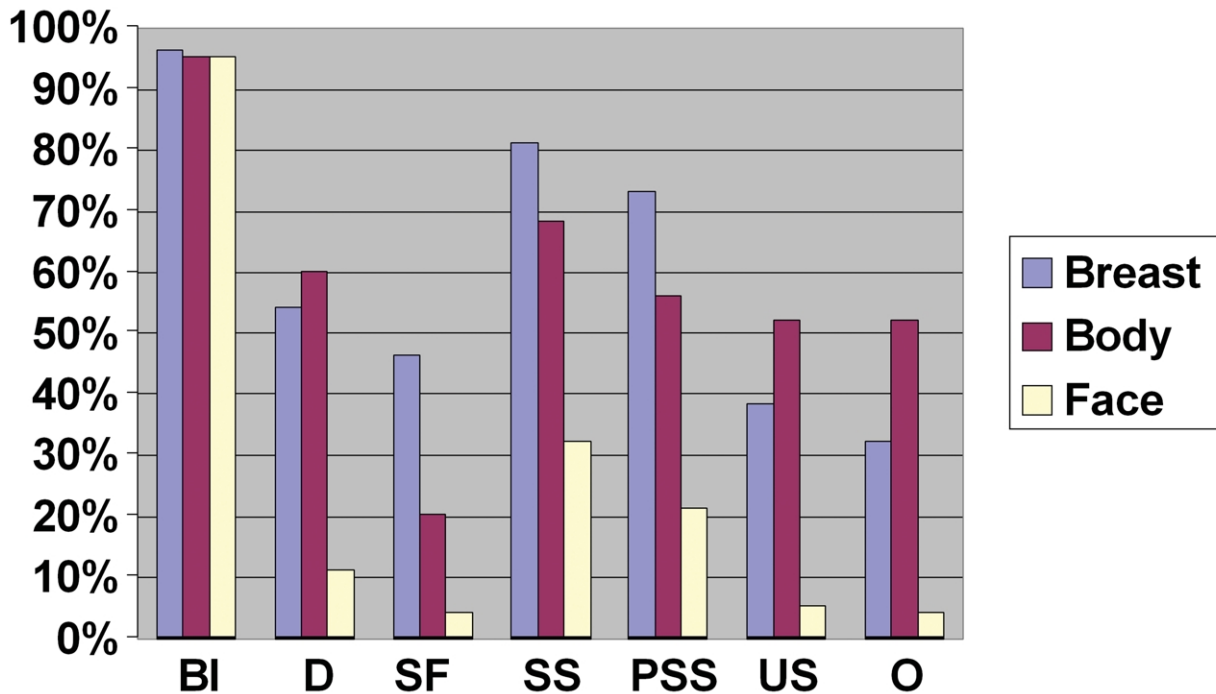


Figure. Changes in body image (BI), dress (D), frequency of sex (SF), sexual satisfaction (SS), partner sexual satisfaction (PSS), frequency of unconventional sex/willingness to engage in new sexual positions (US), and frequency of orgasm (O).

patients or responses from female patients' male partners with regard to the effects of surgery on their sex lives. However, approximately 70% of combined EB group participants testified that their partner's sex life had been enhanced.

We also compared overall body contouring participants (mainly breast augmentation, abdominoplasty, lipoplasty) to facial surgery patients (rhinoplasty and facial rejuvenation procedures). Although more than 90% of participants in both groups had improved body image after surgery, the psychosexual component of their postoperative lifestyles differed dramatically. Statistically significant differences favoring the EB group did exist in 5 categories studied: postoperative personal sexual satisfaction, partner satisfaction, ability to achieve orgasm, willingness to engage in unconventional sex, and provocative attire.

When reviewing the data, age differences became an important consideration. Interestingly, the F group demonstrated very little change in postoperative sexual behavior and/or psychosexual attitude. It should be noted that the F group participants on average were the oldest participants in the group. If their responses are corrected for age, a small majority of F group participants reported enjoying better sexual relations. We considered whether the F group had different sexual tendencies than the BO

group based on age alone. Among all patients responding to the survey, there were exactly the same numbers in the categories under age 40 as in the categories over age 40. This is the median split. Additional analysis was done to determine if there were differences in sexual practices based on the age component alone. Except for the responses concerning unconventional sex, there was no statistical difference in the sexual patterns of women under 40 and those over 40 when looking at increase in sexual activity, partner satisfaction, and revealing clothes. The differences were not as dramatic, as they are based on operation type. Using age as the alternative explanation for the results does not explain why younger women are so prone to change the frequency of their sexual behaviors after aesthetic surgery.

Both the literature¹² and our own clinical experience suggest that breast augmentation can be an incentive for recovery from anorexia. Although it was recently suggested that a correlation between augmentation and suicide exists,¹³ this claim has been disputed by others¹⁴ and is not supported by our personal observations.

Conclusion

Our study indicates that women who have undergone aesthetic plastic surgery are having not only more sex

but also more enjoyable sex. They feel better about their bodies, as indicated by their willingness to show more skin, engage in unconventional sex more frequently, and be more comfortable taking new sexual positions with their partners. We have confirmed that the physical modifications achieved by aesthetic plastic surgery have far-reaching effects and can even influence a woman's ability to achieve orgasm.

It is also clear that our influence as cosmetic surgeons extends well beyond the arena of emotional well-being. Cosmetic surgery does much more than enable a woman to "feel better" about her physical appearance. The effect of cosmetic surgery on the lives of patients and their partners also extends into the bedroom. Perhaps the aesthetic plastic surgeon is not only a "psychosurgeon," as indicated earlier, but also a "psychosexual surgeon," given the sexual benefits that can accompany successful surgery. ■

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Reprint requests: Guy M. Stofman, MD, Division of Plastic Surgery, Mercy Hospital, 1350 Locust Street, Suite G103, Pittsburgh, PA 15219.

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COMMENTARY

by Navin K. Singh, MD, MBA
Baltimore, MD

Dr. Singh serves as Statistical Editor for Aesthetic Surgery Journal.

New knowledge in the rapidly expanding field of aesthetic surgery comes from accumulated wisdom by its practitioners and from compelling evidence amassed through rigorous statistical methods. Each contribution to the body of literature makes incremental advances in our understanding, and these contributions are given weight based on the level of evidence provided. Level I evidence is provided by randomized controlled trials, Level II by prospective and retrospective cohort studies, Level III by case control studies, Level IV by well-designed clinical cross-sectional cohort case series, and Level V by expert opinion and case reports.¹

A well-designed survey, such as this retrospective analysis, observes a cohort of patients who underwent aesthetic surgery, gleaned valuable insights and provided sound evidence. It uses both descriptive statistics (mean, standard deviation) as well as analytic statistics (chi-square analyses).

There is a strong temptation to write a survey, mail it off, tabulate the results, and then figure out which test to run, hoping that the *P* value will turn up somewhere. An a priori design, or conversation with an individual versed in statistical methods, can prevent this. While this commentary cannot address the broader issues of experimental design, laws of probability, and statistical methods, nor provide a boilerplate of which test to run, the Table includes a convenient summary of tests to be considered.

Statistical methods don't constitute proof; they assert that the relationship found was more likely than a chance association. The "Holy Grail" sought after in peer-reviewed publication is $P < .05$. This *P* value is a probability that indicates that there is only a 1 in 20 chance that the conclusion drawn is spurious. Hence, if authors "data-dredge" and run enough *t* tests or chi-squares, some comparisons are likely, simply by a 1 in 20 chance, to come up with $P < .05$. In more rigorous methodolo-