Aging Skin: Some Psychosomatic Aspects

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Abstract

A request for cosmetic procedures for aging skin is typically emotionally or psychosocially motivated as such procedures are usually life enhancing versus life saving. The primary responsibility of the clinician is to ensure that (i) he or she can accomplish what the patient desires and that (ii) the patient is satisfied with treatment outcome. Both of these points can be significantly influenced by psychosomatic factors. Overall trends indicate an increasing number of younger individuals in the 13–29 years age group, and mainly women are seeking cosmetic treatments for facial rejuvenation, especially the minimally invasive procedures. This has important implications as two-thirds of patients with body dysmorphic disorder (BDD), which is considered a contraindication for cosmetic procedures, experience symptoms prior age 18 years. In addition to BDD, younger age, male gender, minimal deformities, unrealistic expectations, and narcissistic and obsessional personality traits are some of the major negative predictors for patient satisfaction with outcome of cosmetic procedures. A slim and well-toned body is typically a feature of a youthful appearance, and in some individuals fear of aging can culminate in excessive drive for thinness and an eating disorder. Several studies suggest that patients seeking cosmetic procedures should be screened for depressive symptoms with a special focus on recent significant losses such as bereavement and divorce. A direct enquiry about abuse history can be psychiatrically destabilizing and heighten suicide risk in patients who may seek cosmetic procedures as an unconscious attempt to “fix” a body that is perceived as tainted by childhood sexual abuse.

Introduction

The skin, especially the facial skin, is a powerful organ of communication and one of the most easily visible indicators of age, health, and disease, and of various socially important attributes such as social status, wealth, and sexual attractiveness [1]. The face is the part of the body invested with the greatest interpersonal meaning and is the focus of attention during communication. The aging of the facial skin secondary to both intrinsic and extrinsic factors (e.g., photodamage and smoking) and the development of hyperfunctional facial lines due to repeated expression of emotion over time can lead to aging of the appearance. Over the last several decades, the cultural and social meanings of growing old have changed and old age has started to acquire increasingly negative connotations. Often normal intrinsic aging is viewed as a medical and social problem that needs to be addressed by health-care professionals. The idea that chronological age itself does not signal the beginning of old age, and that one can get older without the signs of aging, has become increasingly prevalent, with a high value placed by the society on the maintenance of a youthful appearance [1].

Facial appearance and expressions, for example, as a result of the corrugator muscle activity of the forehead (resulting in a frown), play a substantial role in the expression of emotions in addition to signaling attributes such as age [2]. From a Darwinian evolutionary perspective [3], the interpretation of
Facial expression is an integral component of interpersonal communication and tends to be universal and constant across time and cultures [2]. The face is the focus of human communication, and facial expressions have evolved as a means of nonverbal communication and as a way of enhancing verbal communication [2]. The repeated expression of emotion over time produces hyperfunctional facial lines. The presence of these lines when the face is at repose may give the person an aged appearance or give an erroneous impression of emotions or personality characteristics. As the skin ages and the support of the underlying cutaneous structures is lost, more wrinkles and folds develop, and gradually the dynamic lines that communicate emotion change to static lines ingrained on the face at rest. The orientation and depth of these folds is greatly influenced by the underlying activity of the facial muscles. These hyperfunctional lines are common in the forehead, between the brows, around the eyes, and in the area of the mouth. For example, hyperfunctional forehead lines may give an impression of aging, and frown lines or deep vertical creases in the glabellar region give the impression of anger or dissatisfaction. It has been observed that these hyperfunctional lines can result in a “malfunction of the facial organ of communication” [2, 4]. With aging, the corner of the mouth will often droop creating an appearance that may be misinterpreted as displeasure or sadness, or the drooping of the brow or sagging of the upper eyelid may result in the appearance of drowsiness and exhaustion [2]. Therefore, the internal emotion may be quite different from the message received by others, and the disparity between the internal mood and the external appearance can be a significant source of anxiety and may culminate in a feeling of disconnect between the inner self and the face that the individual sees in the mirror. This incongruity may be confirmed in social interactions, resulting in a sense of alienation. These social miscues may further affect reciprocal behavior; for example, a frown is more likely to elicit a frown rather than a smile from another person, and negative responses usually reinforce negative behavior, resulting in greater social alienation. The increasing presence of hyperfunctional facial lines with age therefore has implications far beyond considerations of attractiveness, as they affect the perception of emotions and perceived personality traits of the individual, and treatments to smooth the hyperfunctional facial lines may be warranted because of their positive social ramifications [2]. Cutaneous body-image dissatisfaction has been associated with suicidal ideation when the individual experiences increased interpersonal sensitivity and social alienation during interpersonal interactions [5].

Data from the American Society of Plastic Surgeons [6] report 15.6 million cosmetic procedures in 2014; just under two million of these treatments were traditional cosmetic surgical procedures such as facelift, liposuction, rhinoplasty, and breast augmentation, and 13.9 million procedures involved minimally invasive procedures such as botulinum toxin A injections, soft tissue fillers, laser hair removal, microdermabrasion, and chemical peels, which are largely used to rejuvenate the appearance. It is reported [6] that from 2000 to 2014 the overall frequency of cosmetic surgical procedures has decreased by 12%, while the overall frequency of cosmetic minimally invasive procedures has increased by 154%. Similar trends are reported for facial rejuvenation procedures over the 1-year period from 2013 to 2014; for example, the frequency of facelift (rhytidectomy) decreased by 4% from 2013 to 2014, while the frequency of botulinum toxin type A injections has increased by 6% over this period. It is noteworthy that from 2000 to 2014, the frequency of cosmetic botulinum toxin A injections has increased almost eightfold (748%) and use of soft tissue fillers increased 2.5-fold (253%) [6]. The numbers for cosmetic minimally invasive procedures reported by the American Society of Plastic Surgeons [6] are likely a gross underestimate of the total number of procedures to rejuvenate the appearance, since a large number of the minimally invasive procedures are being performed by nonplastic surgeons.

The gender difference in the experience of the aging of the appearance or the “double standard of aging” [7] between men and women is a very important factor when considering the psychosomatic dimension of aging skin. The gender bias is likely a confounding factor in the psychiatric presentation of individuals with concerns about aging skin, for example, major depressive disorder and eating disorders.
are more common in women and are also encountered in individuals with concerns about aging skin. In men, cutaneous signs of aging, such as graying hair, wrinkles, and a weathered appearance, are typically considered features of a “distinguished” look [8]. The same signs of aging in women are seen as a sign of “defeat” [7], wherein the woman has somehow lost the battle against the ravages of time, and women are pressured to fight the natural process of aging with creams, antiaging products, nonsurgical or minimally invasive procedures, and cosmetic surgery. For example, American Society of Plastic Surgeons data from 2014 report that in 2014, women underwent 87 % of all cosmetic surgical procedures and 92 % of all cosmetic minimally invasive procedures [6]; women were recipients of 94 % of botulinum toxin A injections and 96 % of procedures involving soft tissue fillers [6].

Another aging-related phenomenon is that a greater number of individuals are becoming concerned about aging-related changes at a much younger age. For example, in a telephone survey of 1406 American women, after controlling for demographic and psychosocial factors, aging anxiety related to loss of attractiveness was higher among the 25–35-year-old women (odds ratio or OR ± SE = 6.924 ± 2.709) versus the 56–65 age group (OR ± SE = 3.504 ± 1.321) [9]. A study of nonclinical subjects reports that over 50 % of women under the age of 30 reported dissatisfaction with the appearance of their skin, and some of the attributes they were dissatisfied with such as wrinkles and “bags” and “darkness” under the eyes are the signs of aging of the skin [10]. It is noteworthy that the American Society of Plastic Surgeons data reports an increase from 2013 to 2014 of 7 % in cosmetic botulinum toxin A injections in the 13–19 years age group and 6 % in the 20–29 years age group, versus a 5 % increase in botulinum toxin A use in the 40–54 years age group. This emerging trend, wherein younger individuals may be seeking treatments for cutaneous rejuvenation, further emphasizes the importance of the psychosocial dimension in the overall assessment and management of these patients.

This chapter reviews some of the psychosomatic aspects of aging skin that may be of importance in the clinical management of patients seeking treatment for rejuvenation of their appearance using surgical, minimally invasive procedures and topical therapies.

**Review of Literature**

**Cosmetic Surgical Treatments**

An earlier (1964) comprehensive study [11, 12] of 106 consecutive patients seen at the Johns Hopkins Hospital over a period of 12 years for the surgical correction of facial evidences of aging evaluated the preoperative and postoperative psychiatric state of 46 of the 64 patients (mean age 48.5 years, seven males) who qualified for the surgery. Forty-two of the 106 patients that were excluded had a higher incidence of previous psychiatric treatment and suffered from a much higher incidence of family disruption during childhood. Among the patients that received surgery, “two patterns of interpersonal relationships” were observed; 43 % were “emotionally distant or mistrustful” and were “diagnosed psychopathically as manifesting hysterical tendencies,” and “two-thirds of them described an unhappy marriage”; the remaining 57 % were described as having “passive-dependent” personalities. Edgerton et al. [12] further observe that “over 74 % of the 46 patients who were psychiatrically evaluated) were diagnosed as having some associated but not primary psychiatric disorder” and “only four patients had been previously hospitalized for mental illness” and “only one of these had been found psychotic.” The psychiatric diagnoses among the 46 patients who were evaluated psychiatrically were as follows: “neurotic depressive reaction (often after husband’s death)” in 15 of 46 or 32.6 %, “personality trait disturbance” in 12 out of 46 or 26.1 %, “schizoid personality” in six patients (three of whom were men), and “anxiety reaction” in one patient; the remaining 12 patients had “no psychiatric disorder.” The motivations for patients coming for facelifts differed by age groups: the “emotionally dependent group”
(age 29–39 years) represented 22 % of patients who “tended to be insecure and dependent on their spouses,” reported significantly more family disruption during childhood than the older patients, and demonstrated “problems of adjustment to adult responsibilities”; the “worker group” (age 40–49 years) constituted 37 % of patients whose “major motivation for surgery was to meet vocational requirements for a youthful attractive appearance”; and the “grief group” (age 50 years and older) who comprised 40 % of the sample, and “two-thirds of these were suffering grief over the death of a spouse or separation from children” and sought surgery to give them “self-confidence,” “self-esteem,” and “a new chance to make friends,” but “underlying depression was very common in this group.” Examination of the gender differences revealed that in contrast to the female patients, all the seven male patients had a history of emotional illness and all received a psychiatric diagnosis. As for their reason for seeking surgery, none of the men cited the loss of a loved one as principal motivation. All male patients were reported as facing “a critical life decision at the time of their first visit” and wished to look “less stern” and “not so old and tired” and “to adjust to American living” (in the case of an immigrant). The authors caution that “plastic surgeons should seek to uncover the nature of the decision and determine whether rhytidectomy will realistically aid the outcome.”

The early postoperative course [11, 12] was “generally mild and without serious emotional disturbance”: nine patients showed “mild depression or transient tears” usually on the third or fourth postoperative day, and “some reexperienced the grief previously suffered at the loss of a loved one”; paresthesia and numbness of the facial skin after operation were common and “sometimes augmented the patient’s feeling of unreality.” If blepharoplasty was performed, the blindfolding resulting from pressure bandages over the eyes during the first 48 h postoperatively was associated with heightened anxiety in some patients. This was in contrast with other procedures such as rhinoplasty and augmentation mammoplasty where up to 40 % of patients have been reported to experience significant short-term emotional disturbances. Patients were followed up psychiatrically between 6 months and 12 years postoperatively, and “over 85 % of patients reported significant improvement” in each of the following areas: “personal comfort,” “less self-critical,” “better satisfied with their lives,” “less self-conscious,” “more social ease,” “more self-esteem,” and “happier.” Furthermore, 55 % had obtained one or more of the following: “a new job,” “marriage,” “a promotion or raise,” “a merit award,” “formation of other new, close relationships,” or “termination of an old, detrimental relationship without emotional upset.” No patients reported “guilt feelings” or “having any feelings of deception about her age.” The authors conclude that “satisfactory psychologic result of facelifting depends on several variables” such as “how the patient approaches surgery, with confidence or mistrustful attitudes,” “a genuine and personal interest on part of the surgeon and whether the surgery constitutes a therapeutic or ‘rebirth’ experience,” “the potential for realistic improvement in the patient’s personal environment as a result of the surgical experience,” “how much positive feedback the patient receives from their friends and associates regarding an improvement in their appearance,” and finally “the actual anatomic improvement that the facial skin and subcutaneous tissue permit”; contraindications to surgery where “basically good procedures may produce poor results” included “unresolved emotional conflicts”; and “the effectiveness of a psychiatrist in helping the plastic surgery patient is directly proportional to his interest and experience with the problems of deformity.”

Goin et al. [13] evaluated 50 female facelift patients preoperatively and postoperatively for up to 6 months with semistructured psychiatric interviews and psychological tests. The 50 patients were chosen from 117 consecutive facelift consultations; 20 % of patients were rejected by the surgeon for psychological reasons, which were as follows: patients were “unable or unwilling to listen, were excessively fearful, idealized the surgeon (believing he could accomplish what others had failed to do), or had a history of severe psychological disturbance following other operations.” Preoperatively, psychological testing, e.g., with the Minnesota Multiphasic Personality Inventory (MMPI), revealed “a relatively normal group,” and “there were no clear diagnostic groupings.” Only one patient showed neurotic pathology with
high scores on several MMPI scales and none were psychotic. Four patients were “in the midst of grieving over dead loved ones” at the time of surgery. Clinical evaluation revealed “some evidence of clinical depression,” rated as mild to moderate, in seven or 14 % of patients. Postoperatively, 27 or 54 % of patients “displayed clinical evidence of psychological disturbance,” and 30 % of these patients experienced depression 6 months postoperatively. The patients with depression reactions were divided into four categories [13]: six patients or 12 % described “feelings of depression or anxiety occurring sometime within the first 5 days,” and these symptoms were gone by the end of the first week; and another 12 % had “transient episodes of depression occurring around the second or third week, which lasted 3–5 days,” and “the depression was related to some new stress in the patient’s life” such as divorce and illness in the family. Thirty percent of patients reported more prolonged depression, which was present up to 6 months postoperatively; among these 16 % were depressed within the first 5 days and continued to be depressed for several weeks” and 14 % developed a clinical depression in the second or third postoperative week, which lasted for several weeks.” This group with prolonged clinical depression was reported preoperatively to have “either a preexisting and clinically detectable depression or a high depression score on the MMPI,” and the authors conclude that the surgery either “intensified” or “unmasked” their depression. No other preoperative factors were associated with postoperative depression. The subgroup that became depressed within the first 5 days were more “independent and self-reliant and wanted to control their lives,” “did not anticipate any changes in their self-esteem,” and “had hoped that the facelift would slow down the aging process.” In contrast, the subgroup with later onset depression comprised “passive-dependent women who wished to be cared for and did not want to be in charge of their lives.” This group also had less favorable surgical results. Therefore, overall decrease in the support from the immediate postoperative period and disappointment with results of surgery contributed to the depressive reaction in this last group of women. Postoperatively, improvement was noted in other areas including “increased self-esteem” (28 %), “better able to cope with life” (8 %), “more assertive and comfortable at work” (8 %), and “diminished grief reactions” (8 %). Some of the factors associated with a postoperative improvement in psychological state were as follows: preoperatively, the desire for an improved self-image; a higher-than-average score on the paranoid subscale of the MMPI preoperatively and greater reinvolvement of these patients with friends and colleagues after surgery, which reduced the intensity of their previous distorted perceptions about people; and the patient’s desire preoperatively to improve the chances of retaining a job or advancing her career, or if she had previous cosmetic operations.

A French study [14, 15] measured psychosocial factors in 103 facial cosmetic surgery patients using standardized rating scales and semistructured interviews, both presurgery and 9 months after facial cosmetic surgery. In presurgery, 50 % of patients reported that they had used a psychotropic therapy of which 27 % were antidepressants, 20 % were seeking employment, and 59 % were “motivated by a search for well-being.” The patients had high depression scores presurgery and this did not change significantly after the surgery. Presurgery patients had high scores on measures of social anxiety, especially fear of speaking in public rather than a fear of social interaction, and this decreased significantly postsurgery. Of several psychological motives studied, a lack of self-confidence associated with a desire to create and enhance interpersonal relationships predicted the greatest improvement on postsurgical scores.

In a Brazilian study [16] 32 female Caucasian patients, aged 46–68 years, undergoing rhytidoplasty, were examined preoperatively and 2 and 6 months postoperatively. Measures of health perception, energy, and social function were significantly improved at 6 months postoperatively, while measures of mental health which were related to anxiety and depression, and self-esteem, showed improvement both at 2 and 6 months postoperatively. The authors discuss the improvement in the patients’ overall sense of well-being and not just their psychological health, after the surgery for facial rejuvenation.

A Canadian study [17] examined 93 patients (82 females and 11 males) who had undergone rhinoplasty (49 %) and surgery for the aging face (51 %). All patients were administered the 59-item Derriford
Appearance Scale (DAS59), a validated instrument that measures body image-related distress and dysfunction, preoperatively and 3 months after surgery. Patients were routinely screened for psychiatric disorders, and patients with body dysmorphic disorder (BDD) or related psychiatric disorders were excluded from participation. Facial aging patients and patients in the highest age category (≥51 years) had the lowest baseline DAS59 scores indicating the least amount of appearance-related emotional concern. Postoperatively, there was a significant reduction in all dimensions of the DAS59, with the greatest mean reduction in the factor measuring “general self-consciousness of appearance,” whereas the least improvement was noted for “self-consciousness of sexual and bodily appearance.” Men had higher preoperative levels of distress in contrast to women, especially the males undergoing rhinoplasty; men also exhibited a greater overall percentage decrease in scores postsurgery. The greatest mean percentage improvement in presurgery or postsurgery DAS59 scores was noted in the >50 years age group. Therefore, while the ≥ 51 years age group showed a decline in appearance-related concerns presurgery according to their DAS59 scores, the greatest relative benefits postsurgery were derived for the oldest subgroup of patients.

A prospective American study [18] examining patient satisfaction among individuals undergoing deep plane facelift and other facial rejuvenation procedures (n = 93; mean ± SD age 56.6 ± 9.2 years, age range 35.3–82.8 years; 88.2 % female) found that following surgery (1–43-month follow-up), 96.7 % (89/93) reported a more youthful appearance, 87.1 % reported a positive reaction by others, 82.8 % reported improved self-esteem, and 69.6 % reported improved quality of life after the surgery. There were no reports of depressed mood following surgery, although this was not directly assessed; overall, 50.5 % of patients (47/93) reported a large psychological benefit of surgery, 38.7 % reported a little benefit, and only 10.8 % reported no psychological benefit. No significant effect of age on the above variables was reported. Sarwer et al. [19, 20] examined changes in body image, appearance evaluation, self-esteem, and depressive symptoms among 100 participants (mean age 42.59 ± 13.44) over the course of 2 years following surgery. Of the 127 surgeries conducted, 40.9 % were directly aging-related (29 blepharoplasties and 23 facelifts). Three months following surgery, significant improvements were seen in appearance evaluation and evaluation of body area of concern as well as negative emotion-associated appearance; these improvements were maintained for 24 months postsurgery. Improvements were seen in depressive symptoms and self-esteem, although these did not reach significance at any of the time points assessed.

A similar prospective Norwegian study was conducted by von Soest and colleagues [21, 22] in which women (n = 130; mean ± SD age 37.7 ± 11.2 years) were followed over the course of 5 years after surgery. Of the 154 surgeries performed, only 14 were directly aging related (blepharoplasties). Significant improvements were seen in appearance evaluation and evaluation of area of concern both 6 months and 5 years following surgery, although in comparison to the general population, individuals were still significantly less satisfied with the appearance of the area of concern. In contrast to the Sarwer study, a significant improvement in self-esteem was also observed after 6 months and was maintained at the 5-year time point. Interestingly, psychological problems prior to surgery were predictive of regretting the surgery and reporting that they would not choose the surgery again.

Although not commonly considered a procedure to combat facial aging, recent publications [23] have considered rhinoplasty as a possible means to rejuvenate the facial appearance. There is some evidence that older individuals undergoing rhinoplasty may have greater difficulty integrating their new nose with their body image. Individuals who have only recently started to dislike their nose may be at greater risk to be dissatisfied with the surgical results, although others have reported that individuals who have disliked their nose for a large portion of their life may hold unrealistic expectations of the possible surgical results.

The literature suggests that, overall, patients tend to be satisfied with the results of facial cosmetic surgery. A systematic review of the literature [24] revealed the following factors (in addition to body
dysmorphic disorder) tended to be negative predictors, for patient satisfaction with facial cosmetic surgery: male gender, younger age, minimal deformities, unrealistic expectations, “demanding patients,” “surgiholics,” relational or family disturbances, an “obsessive personality,” and a “narcissistic personality.”

**Nonsurgical or Minimally Invasive Treatments**

A study of 20 patients with mild to moderately photodamaged skin [25] who had entered a study to evaluate the efficacy of topical tretinoin for the treatment of photodamaged skin reported that at baseline the subjects had high scores on the interpersonal sensitivity and phobic anxiety subscales of the Brief Symptom Inventory (BSI). The interpersonal sensitivity (BSI) subscale measures a lack of ease during interpersonal interactions, and the phobic anxiety (BSI) subscale provides an index of a persistent fear response to certain situations including social situations that lead to avoidance of the situations that provoke anxiety. High scores on these BSI subscales therefore suggest that the subjects with photodamage, who were concerned enough about the photodamage-related skin changes to seek treatment, were experiencing uneasiness during their interpersonal interactions [25]. After 24 weeks of therapy, both the interpersonal sensitivity (BSI) and phobic anxiety (BSI) scores decreased significantly \( p < 0.05 \) in the topical tretinoin, but not in the control group that was receiving the inactive vehicle [25]. These findings were confirmed in another study [26] involving 40 additional subjects with moderate to severe photodamage. In this study [26] a significant decrease in phobic anxiety (BSI) \( p < 0.05 \) was observed after 24 weeks of therapy with topical tretinoin, while an increase in phobic anxiety (BSI) \( p < 0.05 \) was noted in the group receiving the inactive vehicle. General body-image concerns related to body weight and shape were measured with the Eating Disorder Inventory (EDI) pretreatment and posttreatment with topical tretinoin. The patients receiving the active treatment with topical tretinoin and not the control group reported a significant decline \( p < 0.01 \) in drive for thinness (EDI) and body dissatisfaction (EDI), which measure an excessive concern about thinness, body shape, and body weight. These findings indicate that aging-related changes affecting the skin caused increased social anxiety and concerns about general aspects of body image related to body weight and shape, and this anxiety and general dissatisfaction with body image decreased with the treatment of some of the cutaneous changes of photodamage [26].

Carbon dioxide (CO\(_2\)) laser skin resurfacing is increasingly used for treating wrinkles and photoaged skin because of its favorable risk-benefit ratio, and patients report high satisfaction with the procedure including improvements with self-esteem and self-satisfaction and an overall improvement with skin-specific quality of life [27]. However, satisfaction with the outcome depends on expectations of minimal to moderate improvement in appearance and health of skin [28]. Interestingly, predictors of dissatisfaction with CO\(_2\) laser skin resurfacing included ideas that the procedure would improve self-esteem as well as a belief of previous facial disfigurement [28]. Treatment of glabellar frown lines with botulinum toxin A has been associated with a favorable psychosocial outcome. In one study [29] 20 women between 35 and 60 years of age, assessed as having moderate to severe glabellar rhytids, received botulinum toxin A treatment to the forehead and crow’s feet area and had standardized frontal and lateral view photographs taken, which were rated for “first impressions” on the following domains: social skills, academic performance, dating success, occupational success, attractiveness, financial success, relationship success, and athletic success. Botulinum toxin A improved first impression scores for dating success, attractiveness, and athletic success ratings; the first impressions on academic performance and occupational success demonstrated a significantly lower (i.e., lower degree of agreement with the descriptive statement associated with the domains) rating after treatment with botulinum toxin A, and this effect was no longer observed when a “smile/relax” variable was added to the model. Another preliminary study [30] used botulinum toxin A to treat glabellar frown lines in ten female patients, ranging in age between 36 and
63 years, diagnosed with DSM-IV [31] criteria for major depressive disorder (MDD) despite treatment with psychotropic drugs and psychotherapy. The time period for which the patients had been depressed ranged from 2 to 17 years, and 7 out of 10 patients had been tried on two or more antidepressant medications. The patients were evaluated 2 months later, and 9 out of 10 patients were no longer depressed both by clinical criteria and scores on standardized rating scales, and the remaining patient who had an improvement in her mood had bipolar disorder. The authors [30] discuss the Darwinian notion that “the free expression, by outward signs of an emotion intensifies it. On the other hand, repression, as far as this is possible, of all outward signs softens our emotions.” Increased frown muscle activity has been associated with depression, and patients that have their frown lines treated with botulinum toxin A appear to be happier, and enhancement of the facial expression of happiness may also make the treated individuals feel happier [30]. Other studies have found similar results and reported that depressed individuals had significant reduction in depressive symptoms, as assessed by the Beck Depression Inventory following botulinum toxin A injections into glabellar frown lines [32]. Patients who received botulinum toxin injections to the forehead had significantly more positive mood than those who did not, which mainly reflected in lower anxiety and depression scores [33]. It is hypothesized that the paralysis of the corrugator muscles from the botulinum toxin therapy results in the lack of negative mood feedback which makes it harder to maintain negative facial expressions and a negative mood [33]. Similarly, a double-blind randomized controlled trial, examining the effect of botulinum toxin A on quality of life and self-esteem, determined that 3 months post-botulinum toxin A administration, patients scored higher on measures of body appearance, satisfaction with weight, and overall life satisfaction and contentment, whereas the placebo group only reported improvements in self-consciousness and ability to understand things [34].

**Psychosomatic Assessment of the Patient**

The request for cosmetic procedures is typically emotionally or psychosocially motivated. Cosmetic procedures are supposed to be life enhancing, not life saving. The primary responsibility of the clinician who is performing an aesthetic procedure is to ensure that (1) he or she can accomplish what the patient desires and (2) the patient is satisfied with the outcome of the procedure. An acceptable indication for an aesthetic procedure is that the procedure will improve the patient’s quality of life. The most common psychiatric comorbidities that can be associated with an unfavorable treatment outcome (Table 1) are discussed below in detail; the presence of body dysmorphic disorder is generally considered to be a contraindication for cosmetic procedures. Edgerton et al. [35] have reported the course of 87 severely psychologically disturbed patients “ranging from moderate degrees of neurosis to frank psychosis” who underwent aesthetic plastic surgery and were followed up for an average of 6.2 years. As many as 82.8 % of patients had a “positive psychological outcome,” 13.8 % experienced “minimal improvement” from surgery, and three patients or 3.4 % were “negatively affected”; among the “negatively affected,” the first patient who had rhinoplasty said that “she had expected to erase the emotional scars from an early childhood trauma,” the second patient with blepharoplasty had a poor surgical outcome, and the third patient who had rhinoplasty was identified as having untreated body-image issues. The authors [35] report that there were no suicides, psychotic decompensations, or lawsuits and further observe that patients with severe psychological disturbances benefited from a “combined surgical-psychiatric treatment designed to address the patient’s profound sense of deformity.”

Some general demographic considerations include the fact that male patients seeking cosmetic procedures tend to have more severe psychopathology than their female counterparts and individuals in their late 40s tend to have the maximum concern about aging of their appearance as at this life stage for the first
time “losses are uncompensated by new gains” [11]. Other considerations during assessment include other life stresses, especially bereavement. During the clinical evaluation, the clinician should assess gender identity concerns which may be covert and a history of abuse. When abuse is suspected, it may be prudent to refer the patient to a mental health specialist, as direct enquiry about the abuse can lead to psychiatric decompensation in patients who are excessively somatically focused. The clinician should be aware of the two to three times higher suicide rate among women who have received cosmetic breast implants [36], as these patients may also seek treatments for facial rejuvenation.

**Psychiatric Disorders Encountered in Patients Requesting Treatments for Aging Skin**

The diagnostic criteria [37] for some of the most clinically important psychiatric comorbidities are summarized in Table 1.

**Table 1** Some clinical features (Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition) (DSM-5) [37] of psychiatric disorders commonly encountered in patients seeking cosmetic procedures

<table>
<thead>
<tr>
<th>Body image pathologies</th>
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<tr>
<td>1. Body dysmorphic disorder (BDD) (also referred to as “dysmorphophobia”) (classified under obsessive-compulsive and related disorders in DSM-5):</td>
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<td>(a) The patient is preoccupied with one or more perceived defects or flaws in their physical appearance that are not observable or appear slight to others. The degree of insight regarding the BDD beliefs can range from good or fair to complete absence of insight where the individual is completely convinced that the BDD beliefs are true</td>
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<td>(b) At some point during the course of the disorder performs repetitive behaviors (e.g., excessive grooming, skin picking) or mental acts (e.g., comparing the appearance with that of others), in response to the appearance concerns</td>
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<td>(c) There is marked distress or impairment in social, occupational, or other areas of functioning resulting from the preoccupation about the appearance, and the preoccupation is not attributable to another psychiatric disorder, such body fat or weight concerns in patients who have comorbid eating disorders</td>
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<td>(d) Common complaints in BDD can include imagined or slight flaws affecting many body areas, most commonly the skin (e.g., perceived acne, scars, lines, wrinkles, paleness), hair (e.g., perceived thinning or excessive body or facial hair), or size and/or shape of the nose. Any body region can be the focus of concern (e.g., eyes, teeth, size or shape of face, lips, chin, eyebrows)</td>
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<td>(e) Common repetitive behaviors include excessive grooming (e.g., excessive combing, styling, shaving, plucking, or pulling hair), camouflage (repeated use of makeup, covering of disliked regions with clothing, etc.), excessive tanning, or compulsive shopping for beauty products. Other body parts such as the genitals, breasts, buttocks, abdomen, upper and lower extremities, overall body size, body build, and muscularity can also be the focus of concern, and several attributes may be the focus of concern simultaneously. Body dysmorphia, presenting with a preoccupation that the body is too small or not sufficiently lean or muscular, is a form of BDD encountered almost exclusively in males</td>
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<td>(f) BDD is most commonly comorbid with major depressive disorder and may be associated with repeated psychiatric hospitalizations, suicidal ideation, suicide attempts, and completed suicide. Eating disorders and BDD can be comorbid. Other emergencies may be associated with the BDD patients’ attempts to correct their perceived flaws by, for example, self-surgery and other self-administered remedies</td>
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2. **Eating disorders** (anorexia nervosa and bulimia nervosa)

(a) **Anorexia nervosa** (AN) is characterized by a refusal to maintain a minimally normal body weight (<85% of expected weight). The patient has an intense fear of gaining weight or becoming fat even though underweight, and there is a disturbance in the way in which one’s body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight. Secondary amenorrhea (absence of at least three consecutive menstrual periods) is present when onset is postmenarcheal. AN can be of the restricting type, where the patient simply restricts her food intake or of the binge eating/purge type, where the patient engages in binge eating and purging behavior

(continued)
Table 1 (continued)

(b) Bulimia nervosa (BN) is characterized by repeated episodes of binge eating, which consists of eating an abnormally large amount of food over a discrete period of time (within a 2-h period) when the patient experiences a sense of lack of control over the eating behavior. Patients may engage in recurrent inappropriate compensatory behaviors to prevent weight gain, e.g., self-induced vomiting, fasting, or excessive exercise, and abuse of laxatives, diuretics, emetics, and diet pills. The binge eating and inappropriate compensatory behaviors have to occur at least twice weekly for a period of 3 months for the diagnosis of BN. The self-evaluation of the patient is unduly influenced by body weight and shape. BN can be purging type and nonpurging type.

Mood disorders

1. Major depressive disorder (MDD) is characterized by one or more major depressive episodes. The essential feature of major depressive episode is a period of at least 2 weeks during which the patient experiences either a depressed mood or loss of interest and pleasure in nearly all activities that they had previously found pleasurable. The patient must also experience at least four of the following vegetative symptoms of depression during this period: significant weight loss when not dieting or weight gain or decrease or increase in appetite, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive or inappropriate guilt, diminished ability to think or concentrate or indecisiveness, and recurrent thoughts of death and suicidal ideation with or without a specific plan for committing suicide. These symptoms cause significant distress or impairment in social, occupational, or other important areas of functioning. The symptoms are not attributable to the physiological effects of a substance or to another medical condition.

2. Bipolar disorder is typically characterized by one or more manic (Bipolar I) or hypomanic (Bipolar II) episodes, in patients who also have a history of major depressive episodes. As the symptoms of mania are usually obviously pathological, the patient with Bipolar I disorder is less likely to be overlooked than the patient with Bipolar II disorder where the symptoms can be more subtle. Mania is characterized by a distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally or persistently increased goal-directed activity or energy, lasting at least 1 week, associated with at least three of the following: inflated self-esteem or grandiosity; decreased need for sleep; increased talkativeness or pressure to keep talking; flight of ideas or subjective experience that thoughts are racing; distractibility; increase in goal-directed activity socially, at work, or sexually, e.g., patient may take on multiple new business ventures without regard to the risk, and almost always there is increased sociability and increased involvement in pleasurable activities that have a high potential for painful consequences, e.g., unrestrained buying sprees; and sexual indiscretions. Hypomania is similar to mania with a shorter duration of 4 days and, unlike mania, is typically not severe enough to cause a marked impairment in social or occupational functioning or require hospitalization.

Personality disorders

1. Narcissistic personality disorder presents as a pervasive pattern of grandiosity, need for admiration, lack of empathy beginning by early adulthood, and present in a variety of contexts as indicated by at least five of the following: grandiose sense of self-importance (e.g., exaggeration of achievements, expectation to be recognized as superior without commensurate achievements), preoccupation with fantasies of unlimited success, belief that one is “special” and can only be understood by people or institutions who are special or of high status, need for excessive admiration, sense of entitlement, tendency to be interpersonally exploitative, lack of empathy, envy of others and belief that others are envious of the patient, and arrogant attitude.

2. Histrionic personality disorder presents as a pervasive pattern of excessive emotionality and attention seeking beginning by early adulthood and present in a variety of contexts as indicated by at least five of the following: lack of comfort in situations where the patient is not the center of attention, interpersonal inactions often characterized by inappropriate sexually seductive or provocative behavior, rapidly shifting or shallow expression of emotions, consistent use of physical appearance to draw attention to oneself, style of speech that is excessively impressionistic and lacking in detail, self-dramatization and exaggerated expression of emotion, easily influenced by others, and tendency to consider relationships to be more intimate than they really are.

3. Obsessive-compulsive personality disorder presents as a pervasive pattern of preoccupation with perfectionism, orderliness, and mental and interpersonal control, at the expense of flexibility and efficiency, beginning in early adulthood, and presents in a variety of contexts indicated by at least four of the following: preoccupation with details, rules, order, and organization to the extent that the major point of the activity is lost, perfectionism that interferes with task completion, excessive devotion to work and productivity to the exclusion of leisure, overconscientiousness and inflexibility about matters of morality and ethics, inability to discard worn out objects even when they have no value, reluctance to delegate tasks to others, miserly spending style toward self and others, and tendency for rigidity and stubbornness.
Body Dysmorphic Disorder (BDD)

BDD is classified under “Obsessive-compulsive and related disorders” (DSM-5) [37]. The prevalence of BDD (Table 1) is 9–15% among dermatology patients, 7–8% among US cosmetic surgery patients, and, according to most studies, 3–16% among international cosmetic surgery patients [37]. The mean age of onset of BDD is 16–17 years, the median age of onset is 15 years, and the most common age at onset is 12–13 years [37]. Subclinical BDD symptoms usually emerge, on average, at age 12–13 years, and the subclinical concerns usually evolve into the full syndrome, although some individuals experience abrupt onset of BDD [37]. Two-thirds of BDD patients have their disorder before age 18 years [37]. Rates of suicidal ideation and suicide attempts are high in both children/adolescents and adults with BDD [37]; suicide risk is reported to be high in adolescents, and BDD onset before age 18 years is more likely to be associated with suicide attempts and greater comorbidity [37]. The preoccupation about a perceived defect or flaw in the appearance in BDD can focus on one or many body areas, most commonly the skin, with some of the common preoccupations consisting of complaints about lines, wrinkles, paleness, and thinning hair [37], concerns that are all typically associated with aging. These have important implications as current trends indicate that an increasing number of individuals are becoming concerned about and seeking treatments for aging-related changes of the skin at a much younger age [6]. Various studies have suggested that patients with BDD who undergo cosmetic procedures experience no change or worsening of their symptom or develop a preoccupation with another imagined flaw [38–40]. BDD patients have been known to become violent toward their cosmetic surgeons when they are dissatisfied with the outcome of surgery. BDD is a contraindication for cosmetic procedures, and these patients require psychiatric management of their disorder.

The patient seeking treatment for aging skin who also has BDD is not likely to have a typical presentation. Preoccupation with an imagined or slight defect in appearance (Table 1), the first diagnostic criterion of BDD, describes the presentation of the majority of cosmetic surgery patients with body-image pathology [38]. When assessing the patient presenting with concerns about aging of the appearance the clinician needs to have a greater index of suspicion for underlying BDD, as it may be difficult to assess, for example, whether the concerns of a 35-year-old woman about some wrinkles or sagging of facial muscles is out of proportion to the clinical severity of the problem. BDD usually begins during adolescence [37]; however, the disorder may not be diagnosed for many years often because the patient may be reluctant to reveal their symptoms, or a major life event such as bereavement or divorce may bring underlying BDD symptoms to the forefront. BDD is usually chronic, although improvement may occur with appropriate treatments; BDD presents with similar clinical features in children, adolescents, and adults, and while BDD occurs in the elderly, little is known about the disorder in this age group [37]. Patients with BDD tend to be significantly younger than other psychiatric inpatients [41]; however, it is difficult to determine whether this indicates to an overall younger demographic or whether younger individuals tend to have more severe BDD requiring treatment. Therefore, the clinician should obtain a history of body-image concerns starting in early adolescence and enquire about a history of other cosmetic procedures which initially may appear to be unrelated to the presenting concern. Secondly, the clinician should enquire about the degree of distress and impairment in functioning caused by the current aging-related problem or other body-image problem with a question like “What does your concern (i.e., the body-image problem) stop you from doing?” For example, if the patient reports that their appearance-related concern has prevented them from maintaining a job or significantly impaired their social functioning, diagnosis of BDD should be considered.

Eating Disorders (ED)

Anorexia nervosa (AN) and bulimia nervosa (BN) (Table 1) usually start during adolescence and young adulthood [37], and among some patients can have a relapsing course with exacerbations and remissions,
and persist into late life [42]. A youthful look is typically associated with a slim and well-toned body, and some individuals may become excessively preoccupied with diet and exercise as their appearance ages [43]. In a small group of individuals who have other risk factors for the development of an eating disorder, the fear of aging precipitated by the cutaneous changes of aging can culminate in eating disorder-related symptoms including anorexia nervosa [44, 45]. Both AN and BN commonly begin during adolescence and young adulthood, and late onset (after age 40 years) AN or BN is considered to be rare for AN and uncommon for BN [37].

It has been noted that ED tend to be underdiagnosed in midlife and beyond because of the prevailing assumption that ED are only disorders of adolescence and early adulthood [46]. ED in midlife can be triggered by midlife transitions such as loss of parents, siblings, or children, divorce, and “empty nest” in conjunction with the loss of a youthful appearance [46, 47]. A study of women who developed first onset ED at age 40 or older (age range 40–65) showed a mean onset of ED at age 45 years (range 40–62 years), with mean ± SD duration of 4 ± 4.7 years [47]. Depression was a commonly observed psychiatric comorbidity (seen in 86 % of women), and history of sexual abuse (present in 64 % of women) presented as a major risk factor for the development of disordered eating pathology after the age of 40 [47]. Menopausal transition can also be a factor in the development of eating pathology, where exit from the reproductive age is a particularly vulnerable period, analogous to the increased risk for ED observed at the entrance into reproductive life in puberty [48, 49]. Additionally, age-associated changes in appearance, such as emergence of wrinkles, loss of hair, and redistribution of body fat, can be associated with a negative impact on physical appearance in the menopausal woman [50]. In older women, aging anxiety and menopause were predictive of disordered eating and body dissatisfaction [51]. A study on body satisfaction in women aged 50 years and older found that only 12.2 % endorsed satisfaction with their body size and that these women had significantly lower BMI [52]. Patients often do not disclose the fact that they have an eating disorder and are ashamed of their chaotic eating patterns, which can range from severe dietary restriction to bingeing and purging, which is often carried out in secrecy. Some patients can experience significant fluctuations in body weight, which can in turn lead to redundant skinfolds, and premature aging of the appearance. In some eating-disordered patients, the concern about cutaneous body image may be grossly inconsistent with the norms for their age [10]. In a cross-sectional study [10] examining concerns about various aspects of skin appearance among under 30-year-old eating-disordered patients (n = 32) and nonclinical controls (n = 34), it was observed that 81 % of the eating-disordered patients versus 56 % of controls reported dissatisfaction with the appearance of their skin (p = 0.03). Some of the cutaneous attributes that were of the greatest concern to the eating-disordered patients were those that are also associated with aging and photodamage, e.g., “darkness” under the eyes, freckles, fine wrinkles, and patchy hyperpigmentation.

One of the central psychopathological factors underlying eating disorders, which have a peak incidence during the teenage years, is difficulties in dealing with the developmental tasks of adolescence and young adulthood. It is possible that the greater concern about aging skin in the eating-disordered sample is an index of the overall difficulties experienced by these patients in dealing with “growing up and growing old,” which may lead this group of patients to seek treatments for their aging face. It is also interesting to note that a study of psychosocial factors among facelift patients [11, 12] identified that 22 % of their patients between the age of 29 and 39 years were “emotionally dependent” and demonstrated “many problems of adjustment to adult responsibilities.” The association between concerns about aging of the appearance and drive for thinness has been studied in nonclinical samples. In a survey of 71 men and 102 women who were all nonclinical subjects attending a shopping mall [53], it was observed that concerns about the effect of aging on the appearance correlated directly (r = 0.4; p < 0.05) with the drive for thinness subscale of the Eating Disorder Inventory (EDI) even after the possible confounding effect of body mass index and chronological age were partialled out statistically. This correlation was significant...
among both men and women. The drive for thinness (EDI) subscale measures an excessive preoccupation with dieting and exercise and an ardent desire to lose weight. Furthermore, among the women the belief that having younger-looking skin is a prerequisite to good looks correlated with drive for thinness (EDI) ($r = 0.3; p < 0.01$) and body dissatisfaction (EDI) ($r = 0.4; p < 0.01$) after the effects of age and body mass index were partialled out statistically. The body dissatisfaction (EDI) subscale measures dissatisfaction with body shape and weight and the concern that certain body regions such as the abdomen, hips, and thighs are too fat. This finding has been replicated among another randomly selected sample of nonclinical subjects [45]. These findings highlight the impact of aging skin on satisfaction with overall body image that is not necessarily related to aging, and this relation was observed independent of chronological age. In clinical samples of patients undergoing the treatment of aging skin with topical tretinoin [25, 26] (discussed under “Nonsurgical or Minimally Invasive Treatments” above), ED-related concerns were measured with the Eating Disorder Inventory (EDI) subscales pre- and posttreatment with topical tretinoin. The patients receiving the active treatment with topical tretinoin (who demonstrated objective improvement in their aging-related cutaneous changes) and not the control group reported a significant decline ($p < 0.01$) in drive for thinness (EDI) and body dissatisfaction (EDI), which measure an excessive concern about thinness, body shape, and body weight.

**Mood Disorders**

Most of the psychosocial studies on the treatment of aging skin observed the importance of depressive symptoms of some type; around 14 % [13] to 33 % [11, 12] of patients were described as having depressive symptoms prior to their facelift surgery; during the early postoperative course, up to 24 % of patients [13] were observed to experience a transient flare-up of depressive symptoms which were partly related to the emergence of feeling about the recent death of a loved one and other psychosocial stressors; 30 % [13] of patients experienced a more prolonged course of depression and this group also had more depressive symptoms preoperatively. In one study [14, 15], the depression scores did not change significantly presurgery to postsurgery. In nonsurgical studies, patients seeking treatment for photodamaged skin with topical tretinoin [25, 26] did not have high depression scores at baseline; and a preliminary study indicates treatment of glabellar frown lines with botulinum toxin A, in patients with major depressive disorder, was associated with remission of depression, which was previously treatment resistant in all patients except one who turned out to have bipolar disorder [30]. More recent studies [32–34] have found similar results, which are discussed above under “Nonsurgical or Minimally Invasive Treatments.” These findings from a wide range of studies suggest that patients seeking cosmetic procedures should be screened for depressive disease with a special focus on recent bereavement or other significant losses (e.g., children leaving home); management of depressive illness prior to therapy is likely to be associated with a more favorable postoperative course.

The clinician should specifically assess for bipolar disorder (Table 1) because a patient who presents with depressive symptoms may in fact be bipolar. The bipolar patients who are most likely to be overlooked are those with more subtle symptoms, i.e., patients with Bipolar II disorder. The patient with Bipolar II disorder who is hypomanic may present as a social, extroverted individual who is highly motivated to improve her appearance, or she may have a grandiose and unrealistic view of how the cosmetic procedure can further improve her appearance. Hypomaniac patients can be very pleasant and complimentary, or they may be irritable, in which case they are more likely to get psychiatric attention. The patient’s motivation for surgery or desire to have a cosmetic procedure may totally change once the patient is no longer hypomanic. A hypomaniac patient may be on a spending spree and not be able to afford procedures that they have signed up for. Some bipolar patients may “overcompensate” psychologically and have a hypomanic reaction after major bereavement, e.g., death of a spouse. It is important to identify
such situations, especially as the literature [11–13] suggests that a significant number of patients seeking treatments for aging skin have recently suffered the loss of their spouse.

**Anxiety Disorders**
The literature suggests that patients seeking treatment for aging skin suffer from a range of anxiety-related symptoms, but generally do not meet all the criteria for an anxiety disorder [31]. Prior to treatment, some patients reported anxiety during interpersonal interactions and increased self-consciousness [11–13, 25, 26]. These represent some features of social phobia or social anxiety disorder [31], which is characterized by clinically significant anxiety provoked by exposure to certain types of social or performance situations, often leading to avoidance behavior. Overall, there was an improvement in social anxiety-related symptoms post-treatment.

**Trauma and Stress-Related Disorders**
The clinician should be aware that some patients seeking body-image surgery are survivors of childhood sexual abuse [54] and may be suffering from posttraumatic stress disorder (PTSD) [31, 37]. It has been observed that “plastic surgeons treat child sexual abuse survivors without being aware of it.” Such patients often appear well adjusted and may become symptomatic under the specific stresses of surgery [54]; for example, they may start having flashbacks of their trauma. For some patients, the decision to have cosmetic procedures is their attempt, albeit unconscious, to “fix” a body that is tainted by abuse. A commentary by Summit [54] notes that the abused child “will tend to blame his or her body for causing the abuse and will tend to search for the idealized authority figures who might both redeem the body and undo the abuse.” Some patients may have a history of multiple cosmetic procedures [54] which they may not have found to be satisfactory; many patients with histories of childhood sexual abuse may not have conscious recollection of the their traumatic experiences. Summit [54] cautions against being too intrusive as a direct enquiry regarding a history of abuse can seriously psychiatrically destabilize some patients with chronic PTSD; he observes that “walking the fine line between support and intrusion requires experience and deserves consultation with specialist colleagues.” Several epidemiologic studies have reported that the suicide rate among women with cosmetic breast implants is two to three times the expected rate [36]; it is not difficult to speculate that this may be related to the fact that patients with childhood sexual abuse and PTSD who are at a much greater risk for suicide are also more likely to seek body-image surgeries.

**Dissociative Disorders**
Patients with dissociative disorders may experience psychiatric decompensation after body-image surgery. Depersonalization disorder following massive weight loss has been reported, with a male patient aged 44 reporting emotional numbing and estrangement from his body 4 weeks following bariatric surgery; these symptoms lessened but persisted even in the face of individualized therapy sessions [55]. Cosmetic procedures for facial rejuvenation can theoretically trigger dissociation in patient with dissociative disorders. If the clinician suspects an underlying dissociative disorder, it is advisable that a mental health clinician be involved when informed consent is being obtained to carry out the procedure; as in cases of severe dissociative disorders such as dissociative identity disorder (or multiple personality disorder), all dissociated parts may not consent to the procedure.

**Psychotic Disorders**
Cosmetic procedures for facial rejuvenation have generally not been associated with psychotic decompensation [35]; this is in contrast to aesthetic rhinoplasty patients who, for example, have been shown to develop psychotic disorders such as schizophrenia years after the surgery. Schweitzer et al. [56] have described the case of a woman who underwent routine rhytidectomy with satisfactory aesthetic results.
The patient had no past psychiatric history. Twenty-four hours postsurgery, she became delusional; however, her sensorium was clear. Her symptoms cleared within 2 weeks after antipsychotic drug therapy was started. The patient had a history of severe abuse and neglect during her childhood; appearance was of overriding importance for the female family members, and the patient’s mother used to be very critical of the patient’s appearance. It is possible that the patient’s decision to seek surgery was related to some unresolved issues from her childhood which surfaced after surgery and resulted in a psychotic decompensation. In such cases, it is helpful to ascertain the symbolic significance of the procedure for the patient.

**Personality Disorders**

Patients seeking procedures for rejuvenation of their appearance have been identified as having some “Cluster B” (narcissistic and histrionic) and “Cluster C” (obsessive-compulsive and dependent) personality traits [31, 37]. Both narcissistic and obsessional personality traits have been associated with patient dissatisfaction with cosmetic facial plastic surgery [24]. Individuals with severely narcissistic personalities may develop a major adjustment disorder in reaction to the cutaneous signs of aging. Among such narcissistic individuals who typically have pervasive pattern of grandiosity and need for admiration, having a youthful appearance is often a precondition for self-acceptance and trusting that they will be accepted by others; and an aging appearance can result in a significant emotional crisis, including a severe depressive reaction. A patient with severe narcissistic personality traits is therefore more likely to have unreasonable expectations of cosmetic procedures for facial rejuvenation [57]. The patient with histrionic personality traits tends to be excessively emotional and attention seeking, may use her physical appearance to draw attention to herself, and will tend to react negatively to decreased attention from others as a result of aging-related changes; such patients are also likely to have unrealistic expectations of what treatment has to offer. Several studies have shown that patients seeking cosmetic procedures have a greater need to be in control of their lives and have obsessive-compulsive personality traits [13], and the younger group of patients seeking facelifts [11, 12] tended to have dependent personality traits. Some of these patients experienced short-term depressive reactions postsurgery; however, generally they were satisfied with the outcome of the cosmetic procedures.

Patients with borderline personality disorder (BPD) (also classified under “Cluster B”) [37] may seek treatment from plastic surgeons in two different situations: for treatment of self-inflicted injury or as a feature of their insatiable requests for aesthetic procedures [58]. BPD patients’ preoccupation with appearance tends to shift from one body part to another over time, and BPD patients may request corrections involving multiple body regions to avoid perceived abandonment by the surgeon or because of their impulsivity [58]. BPD patients tend to have unrealistic expectations of treatment outcome, and it is important that the clinician remain inflexible to any unrealistic requests. BPD may express disappointment or anger toward the surgeon by externalizing behaviors, changing doctors or intentional self-mutilation [58]. In a study of 133 plastic surgery patients over a 1.5-year period, BPD patients had on average 4.5 requests for operating sites and were the most dissatisfied personality type [57]. Because of the fluctuating concerns with appearance and tendency for unrealistic expectations, it is recommended that plastic surgery on individuals with BPD be avoided [58].

Goin et al. [13] have further observed that a patient with paranoid personality traits improved after surgery for a facelift even though “ordinarily psychiatrists are quite wary about recommending elective operations for patients known to be paranoid.” They observe that the paranoid patient had a favorable adjustment as the alterations produced by a facelift are not drastic body alterations and the changes do not necessitate “extreme personality organization.” The paranoid patient became more socially interactive following her facelift, and this reduced her paranoid thinking.
Conclusion

Cosmetic procedures for aging skin are typically life enhancing versus life saving and tend to be primarily emotionally or psychosocially motivated. Psychosomatic aspects of aging skin should therefore be taken into consideration in the patient seeking treatment for rejuvenation of their appearance (using surgical, minimally invasive procedures or topical therapies), as they can play an important role in the clinical management and patient satisfaction with treatment outcome.

Cross-References

- Assessing Quality of Life in Order Adult Patients with Skin Disorders
- Psychological and Social Implications of Aging Skin: Normal Aging and the Effects of Cutaneous Disease

References


