Psychopathological Evaluation of Patients Requesting Cosmetic Rhinoplasty
A Review

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ABSTRACT

Objective: *The goal of this review is to discuss possible underlying psychopathological situations in patients requesting surgical cosmetic rhinoplasty operation and to examine potential problems that might arise.*

Subjects and Methods: *An extensive search was conducted through PubMed, Ambase and PsychInfo by using related keywords in English, like "rhinoplasty and psychiatric comorbidities", "rhinoplasty and psychopathology".*

Results: *Patients who demand cosmetic rhinoplasty operation appealed to the surgeon since they wanted to feel better about themselves after the surgery. Indeed, some long-term studies determined that such a situation can take place at high rates. However, some studies reported the possibility of serious psychological disorders after such surgical operations. Studies relating to the analysis of psychopathologic symptoms are quite limited. Research has shown that psychopathologic evaluation conducted preoperatively is especially important to identify serious psychopathologies such as personality disorders and body dysmorphic disorder (BDD).*

Conclusions: *Exclusion of patients possessing serious psychopathologies from operations provides better results in the long term. The lack of sufficient research in this area necessitates new and comprehensive studies.*

Keywords: Cosmetic rhinoplasty, psychiatric comorbidities, psychopathology

Evaluación Psicopatológica de Pacientes que Requieren Rinoplastia Cosmética
Una Revisión

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RESUMEN

Objetivo: *El propósito de esta revisión es discutir las posibles situaciones psicopatológicas detrás de pacientes que solicitan la operación de rinoplastia quirúrgica cosmética, y examinar problemas potenciales que podrían suscitarse.*

Sujetos y Métodos: *Se llevó a cabo una búsqueda extensa a través de PubMed, Ambase y PsychInfo usando palabras claves en inglés, como "rinoplastia y comorbidades psiquiátricas" "rinoplastia y psicopatología" .*

Resultados: *Pacientes que solicitaban una operación de rinoplastia cosmética, apelaron al cirujano expresando que deseaban sentirse mejor luego de la cirugía. En realidad, algunos estudios a largo plazo determinaron que una situación semejante puede tener una alta tasa de ocurrencia. Sin embargo, otros estudios reportan la posibilidad de trastornos psicológicos serios Los estudios que se refieren al análisis de síntomas psicopatológicos, son muy limitados. Las investigaciones han demostrado que realizar una evaluación psicopatológica antes de la operación, es en extremo importante [ara identificar serias psicopatologías tales como trastornos de la personalidad y Trastorno Dismórfico Corporal (TDC).*

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Conclusiones: *El excluir a los pacientes con serias psicopatologías de las operaciones arroja mejores resultados a largo plazo. La insuficiente investigación en esta área apunta a la necesidad de que se realicen estudios nuevos y abarcadores.*

Palabras claves: Rinoplastia cosmetic, comorbidades psiquiátricas, psicopatología

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INTRODUCTION

Most people request cosmetic surgical procedures to feel better psychologically. Indeed, some long-term studies show that such procedures provide satisfaction. However, for some patients, this process may not give the results expected and this can create serious problems for both the patient and the surgeon (1–3). These problems can lead to the request for recurrent surgeries, depression of the patient and adaptation problems, social isolation, family problems, self-destructive behaviour, anger towards the surgeon and health personnel (4). While some studies looking at rhinoplasty operations report high satisfaction, some studies indicate psychological problems after surgery (5).

Dissatisfaction with physical appearance in cosmetic surgery candidates was most pronounced in individuals who desired a rhinoplasty (6). Surgeon and patient alike expect improved postoperative looks to enhance quality of life by boosting self-esteem and reducing social anxiety, obsessive-compulsive disorders, hostility and paranoia (7, 8). The positive effect of the operation on the patient's body image and the perception of the corrected body part, in particular, have been found to be present three months postoperatively and are maintained more than two years after the procedure (9). From this perspective, rhinoplasty may be seen as a psychotherapeutic intervention by surgical means or as 'psycho-surgery' (10, 11). For most patients, severity of the deformity is not crucial for their incentive and a correlation between objective ratings of nasal appearance and psychometric data has not been observed (9).

The goal of this study is to highlight the importance of preoperative psychopathological evaluation of patients requesting cosmetic rhinoplasty in coping with long-term problems. The decision of which patient request to accept is discussed.

Additionally, we discuss the presence of possible underlying psychopathological conditions in patients requesting surgical cosmetic rhinoplasty operation and examine potential problems that might arise. Another goal is to underline the importance of keeping the psychopathological dimension in consideration while choosing patients and reducing long-term problems to a minimum, in order to achieve patient satisfaction and operation success.

SUBJECTS AND METHODS

An extensive search was performed to achieve the goals through PubMed, Ambase and PsychInfo by using related keywords in English like "rhinoplasty and psychiatric comorbidities", "rhinoplasty and psychopathology".

ASSESMENT OF PSYCHOPATHOLOGICAL ASPECTS

Presence of psychopathological symptoms in patients requesting cosmetic rhinoplasty

The studies in this area were quite limited and preoperative and long-term follow-up methods used in these studies were very rare. Studies using both methods were lacking. However, keeping the importance of the issue in mind, we tried to review the limited literature that is available.

Around the middle of the last century, the correction of a minor deformity was considered to be contraindicated because of predictable patient dissatisfaction and requests for revision or even complete reversal of the operation (12, 13). These unfavourable courses appeared to be less frequent than expected. Eight of 10 patients with a psychiatric diagnosis of psychological disturbance did benefit from rhinoplasty according to the psychiatrist's assessment (14). The wish to undergo surgery should therefore not be interpreted as a prodrome of impending mental illness but rather as a promising attempt to soothe emotional distress and gain a new social identity (15, 16).

In their psychiatric evaluation, Conolly and Gibson (17) included 47 patients selected from 180 patients that had rhinoplasty operation ten years ago. They found severe psychiatric symptoms in 40 people and schizophrenia in five. In addition, they also determined that a significant portion of these patients did not have significant nose injuries prior to the operation. It is highly probable that these patients had seriously negative perception about the appearance of their noses. However, some short-term follow-up studies determined significant improvement in psychiatric symptoms such as anxiety, neuroticism, and social relations of the patient after rhinoplasty operations (18–20). In their study, Slator and Harris (21) included a cluster of 77 patients who had rhinoplasty operation five years previously; the patients were divided into two groups: one group consisted of patients who had traumatic injuries before the operation and the other group had rhinoplasty for cosmetic purposes. Between the two groups, no significant difference was found in the severity levels of psychological symptoms. In that study, various psychometric measurement scales were used. In the same study, the patients who did not have a previous history of nose injury were discovered to be extremely preoccupied

with how they look and most patients reported satisfaction with their current state. In their research where they evaluated a group of patients, Ercolani *et al* (22) studied patients three months prior to, and three months, six months and five years after their operations. This study consisted of 25 male and 54 female patients who applied for cosmetic rhinoplasty surgery. Among these patients, seven of them decided not to have the operation, five of them were rejected because they had severe dismorphobia and held unrealistic expectations. After the operation, 14 patients did not participate in the study. When the patients were evaluated six months and five years after the operation, significant improvements were determined in neuroticism and anxiety symptoms. In this case, the importance of the exclusion of patients with serious psychiatric symptoms from operations in order to obtain healthy long-term results is highlighted. Those patients requesting cosmetic rhinoplasty and who did not have severe symptoms, showed serious long-term improvements which brought high levels of personal satisfaction.

In the study by Edgerton *et al* (5) which included 35 female and 11 male patients, personality disorder diagnosis was concluded in approximately 50% of patients as a result of postoperation evaluations. All the patients had rhinoplasty operation for cosmetic purposes. Some researchers state that the presence of severe psychotic, neurotic and narcissistic symptoms in some patients may play important roles in the occurrence of serious psychiatric conditions (23).

In some more recent investigations based on the ‘General Health Questionnaire-28’, ‘Roger’s Self-Concept Questionnaire’, and the Inventory of Interpersonal Problems ‘IIP-32’, scores for depression, anxiety, psychosomatic symptoms and social impairment were not elevated and no relationship was found between mental health, self-concept and the decision to undergo rhinoplasty (24, 25). In contrast, all rhinoplasty patients were found to have abnormal scores under the Minnesota Multiphasic Personality Inventory (MMPI) test, with obsessiveness as the most frequently noted personality trait, compared with 40% of the control group who did not have normal scores (26).

Presence of body dysmorphic disorder

Patients with body dysmorphic disorder (BDD) have serious clinical, occupational and social impairments (27). Body dysmorphic disorder or, in its extreme form, dysmorphobia, is a recognized psychiatric condition in the Statistical Manual of Mental Disorders, Fourth Edition [DSM-IV] (28, 29). Body dysmorphic disorder has a prevalance of approximately 1% in the general population (30). These patients obsessively develop ideas of their self-perception for hours throughout the day. In addition to seeing themselves as having an ugly body image, their beliefs can reach delusional levels (31). In order to dissipate their high levels of stress, they constantly expect convincing words from others and repeatedly check their image in the mirror. They try to hide the body part that they feel is imperfect in various ways (32). They isolate themselves socially and can even resort to committing suicide when they lose hope that they can change the look of their body (31, 33). These patients frequently search for cosmetic operations. In general, BDD diagnosis has been established in 6% to 15% of patients that request cosmetic surgical attempts (32, 34). The constant preoccupation with their nose structure is frequently seen in individuals with BDD (31, 33, 35). In their study, which included seven male and 22 female patients requesting cosmetic rhinoplasty, Veale *et al* (36) determined serious BDD symptoms in eight of them. In this study, psychometric scales measuring symptomatic complaints were also used. A definite disorder diagnosis was not made. However, a high possibility of BDD was reported. In their study including 58 patients with BDD diagnosis requesting cosmetic rhinoplasty operation, Philips *et al* (37) reported that 82.6% had conditions that were described by the patients as being either the same or worse after the operation. In these individuals, cosmetic operations are rarely beneficial. In some cases, dissatisfaction from the surgical outcome may result in anger and aggression towards the health personnel (38, 39). Body dysmorphic disorder and depression often coexist, with 94% of patients reporting depression at some point during their treatment of BDD (40). It is estimated that 26–40% of patients with BDD received the procedure for which they applied (29); even though 25% of patients report a subjective improvement of appearance, BDD is improved by surgery in only 3.6% (29). Eighty-four per cent of a surveyed group of plastic surgeons reported operating on a patient with BDD, having failed to recognize the disorder before the operation (30).

DISCUSSION

The number of studies looking at psychopathological aspects of patients that request cosmetic rhinoplasty is quite limited. Most of these studies are not preoperative specific evaluations (41). Preoperative evaluation of patients requesting cosmetic rhinoplasty is very important. The acronym SIMON (single, immature, male, over-expectant or obsessive, narcissistic) was coined for the male high-risk patient who was more likely to be dangerous, whereas SYLVIA (secure, young, listens, verbal, intelligent, attractive) applied to a good candidate (42–44). However, rhinoplasty attempts with cosmetic purposes may not give the same result for each patient. Even after many years, a group of patients continue to live with intense dissatisfaction (22). Critical preoperative psychiatric evaluations have an important place in excluding serious pathologies. This way, patients diagnosed with personality disorders and BDD would not go through the operation, thus reducing possible stressful situations. Those diagnosed with BDD may not be satisfied with surgical attempts, requesting recurrent surgical interventions as a result (37). Thus, reasons for recurrent requests should be determined. This way, underlying serious psychopathologic situations may be determined. It might be quite difficult for a surgeon to determine serious underlying personality disorders and

BDD. Questions based on DSM-IV criteria that are supposed to help the surgeon screen for BDD (40, 45) are as follows: (1) Are you very worried about your appearance in any way? (2) Does this concern preoccupy you? That is, do you think about it a lot and wish you could worry about it less? (3) What effect has this preoccupation with your appearance had on your life? A severe BDD or dysmorphobia is likely if the answer to these three questions is yes and one positive answer is suggestive. It is still a matter of debate when surgery should not be offered, as many individuals with a mild form may be satisfied with the outcome of surgery but only one out of 10 patients report improvement in symptoms of BDD after surgery and more than 90% continue to have BDD (29, 30, 36). Information gathered from family, and suspicious symptoms may be helpful. In such cases, help from a mental health specialist may be requested. If such situations can be excluded, cosmetic rhinoplasty can yield successful long-term results. The danger cannot be completely excluded by the use of scales measuring only psychological symptoms. However, it can provide a warning for possible underlying personality disorder and complex situations such as BDD.

The psychological aspects of cosmetic rhinoplasty can have a profound impact on the postoperative course. Recognizing risk factors during the preoperative consultation is important. The decision whether to operate should be made in a systematic way that factors in the physical, psychological and psychosocial issues at hand. All consultations should be made by plastic and reconstructive surgery, otorhinolaryngology and psychiatry clinics. The limited number of studies in this area necessitates new and more comprehensive studies to be conducted. Studies in this area should be done jointly by mentioned clinics.

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CME

Answer to Images and Diagnoses

Question on page 148

Comment: The patient has two pathologies.

1. A mass in the pituitary fossa which is hyperintense on T1 sequence and shows no significant enhancement with contrast. The lesion compresses the proximal aspect of the optic chiasma.
   This appearance is consistent with haemorrhage into a pituitary macroadenoma.
   Haemorrahge into a pituitary tumour may result in apoplexy – a medical emergency – symptoms of which often include headache, nausea, visual loss and double vision.

2. The second lesion is also well defined. It arises from the region of the hypothalamus and is similar in signal to brain on both sequences, showing no significant enhancement.
   The appearance is consistent with a hypothalamic harmatoma.
   Hypothalamic hamartomas are rare. They lie between the optic chiasma and pons and usually do not distort the hypothalamus or other parts of the base of the brain unless they are very large.
   They occur with equal frequency in males and females. Most patients usually present in the first or second decade of life. The diagnosis is made on the basis of the characteristic location, isointensity to normal brain and lack of contrast enhancement.