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Personality patterns and psychological profile of persons undergoing blepharoplasty

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Abstract

Introduction: Some evidence suggests that people who undergo blepharoplasty may have special personality patterns or psychological disorders. This study evaluated the personality patterns and psychological profiles of patients undergoing upper blepharoplasty.

Materials and Methods: A prospective cross-sectional study was performed in a tertiary center between March 2016 and August 2017. Fifty individuals who were candidates for upper blepharoplasty were enrolled. The Millon Clinical Multi-Axial Inventory questionnaire (MCMI-III) assessed personality patterns and psychological profiles.

Results: The mean age was 40.32 ± 5.70 years, and 43 (86%) were females. Twenty-six participants (52%) were college-educated. The mean score for severe clinical syndromes, including thought disorder, depression, and delusional disorder, was 44.48 ± 22.55, 50.28 ± 17.81, and 29.92 ± 23.18, respectively. The mean score for schizotypal, borderline, and paranoid disorders was 27.66 ± 14.93, 36.42 ± 17.59, and 43.70 ± 17.30, respectively. Among clinical syndromes, generalized anxiety had the highest score (60.46 ± 7.59). Among clinical personality patterns, histrionic had the highest score (65.78±19.78). In the clinical personality patterns examined, five patients (10%) exhibited an abnormal score in the melancholic category, eight patients (16%) in the histrionic category, and five patients (10%) in the compulsive disorder category.

Conclusion: The frequency of clinical syndromes and abnormal personality patterns in the population studied was low. However, some abnormalities, such as melancholic, histrionic, and compulsive patterns, require psychological treatment. Treatment of these abnormalities may affect the demand for cosmetic procedures such as blepharoplasty.

Keywords: Blepharoplasty, Personality pattern, Psychological profile

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Introduction

According to the International Society of Aesthetic Plastic Surgery (ISAPS), cosmetic surgery is increasing worldwide. In Iran, cosmetic surgeries have increased in recent decades (1-3). A positive effect on physical appearance for the patient will improve psychological status by increasing self-confidence and self-esteem (4). According to the literature, improved self-esteem is related to

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job satisfaction, success, and quality of social relationships (5,6).

There are controversial reports regarding the psychiatric disorders in individuals seeking cosmetic surgeries. Some believe that most people seeking cosmetic surgery procedures are psychologically healthy and do not present with significant levels of dysfunction (7). They reported that there was no difference between patients seeking cosmetic surgery and the general population with psychological disorders (8). In contrast, many studies have shown that patients seeking cosmetic surgery experience a variety of distress and psychological disorders, the rate of which is much higher compared to the normal population. Collines et al. showed body dysmorphic disorder and psychological distress in orthognathic surgery patients (9). Another study reported that anxiety and depression are common among patients seeking elective cosmetic surgeries, and 44% had a history of psychiatric disorders (10).

The face significantly affects a person's overall well-being, and many attitudes are expressed through the face, including likeability, social skills, and aggressiveness (11). Reilly et al. extend the effect of facial rejuvenation beyond youthfulness and beauty. They showed that in a sample of 30 white female patients, facial rejuvenation surgery positively affected the traits of likeability, social skills, attractiveness, and femininity (11). Not surprisingly, based on ISAPS reports, eyelid surgery is the third most common cosmetic procedure.

Blepharoplasty is one of Asia's most commonly performed facial cosmetic procedures (12,13). This study aimed to investigate the psychological profiles and personality traits of Iranian individuals who are candidates for blepharoplasty surgery.

Materials and Methods

A prospective cross-sectional study was conducted between March 2016 and August 2017 on individuals who were candidates for upper eyelid blepharoplasty at a tertiary care center in Mashhad University of Medical Sciences, Mashhad, Iran. The present study used convenience sampling and according to the enumeration method, a sample size of 50 participants was considered appropriate.

Individuals over 18 years old who were candidates for cosmetic upper eyelid blepharoplasty were included. Patients with acute mania, schizophrenia, or a history of cosmetic surgery to repair a true defect, such as congenital malformations or corrective as the result of past surgery or suicidal ideation, were not included. One senior surgeon performed all blepharoplasty surgeries, as customized marking previously described (14).

Research instrument

A) The Millon Clinical Multi-Axial Inventory-III (MCMI-III): This instrument assesses the participants' psychological profiles and personality traits. The validity and reliability of the Persian version have been confirmed in previous studies. The questionnaire consists of 4 dimensions, including severe clinical symptoms (thought disorder, major depression, and delusional disorder), a clinical syndrome (generalized anxiety, somatic symptom, bipolar disorder, persistent depression, alcohol use, drug use, post-traumatic Stress), clinical personality pattern (schizoid, avoidant, melancholic, dependent, histrionic, narcissistic, antisocial, sadistic, compulsive, negativistic, masochistic) and severe personality disorder (schizotypal, borderline, paranoid). The total score ranged between 0 and 115. A higher score means worsening the conditions. A score of 60 indicates clinical distribution, 75 is a cut score for the presence of the disorder, and 85 is a cut score for the severity of the disorder. A score between 60 and 74 represents normal functioning, 75-84 corresponds to abnormal personality patterns but average functioning, and a score above 85 is considered clinically significant (15).

The questionnaires were introduced to the included participants in a quiet room in the Khatam-Al-Anbia Eye Hospital in Mashhad, Iran. Researchers carefully answered any query about the questionnaire.

Participants were assured that the questionnaires' contents were private. After the questionnaires were completed, an experienced psychologist analyzed them. We performed statistical analysis using the SPSS version 22, descriptive statistics, and the independent t-test.

Results

A total of 50 participants were studied. The mean age was 40.32 ± 5.70 years, and 43 (86%) were females. Twenty-six participants (52%) were college-educated. The mean scores of MCMI-III personality inventory in patients undergoing upper blepharoplasty are presented

in Table 1. There was no significant difference between males and females in severe clinical syndromes and clinical personality patterns. However, in the histrionic personality pattern, males had higher scores than females (*P*= 0.04). In the narcissistic pattern, males had higher scores than females. The difference was not significant (*P*= 0.08). The data are presented in Table 2. The mean sadistic pattern in non-college-educated individuals was significantly higher than in college-educated ones. The mean schizotypal disorder in non-college-educated individuals was higher than that in college-educated ones in a near borderline (*P*= 0.06). There was no significant difference between college-educated and non-college-educated participants in other severe clinical syndromes and clinical personality patterns. Data are presented in Table 3.

Table 1. The scores of MCMI-III in patients undergoing upper blepharoplasty

Variable	Mean ± SD
Severe clinical symptoms	-
Thought disorder	44.48 ± 22.55
Major depression	50.28 ± 17.81
Delusional disorder	29.99 ± 23.18
Clinical syndrome	
Generalized anxiety	60.46 ± 7.59
Somatic symptom	56.46 ± 15.94
Bipolar disorder	30.10 ± 21.93
Persistent depression	52.42 ± 11.75
Alcohol use	19.28 ± 11.15
Drug use	18.36 ± 10.08
Post-traumatic stress	44.80 ± 17.73
Clinical personality pattern	-
Schizoid	53.04 ± 11.76
Avoidant	44.16 ± 18.24
Melancholic	61.64 ± 13.40
Dependent	39.80 ± 21.91
Histrionic	65.78 ± 19.78
Narcissistic	49.97 ± 22.71
Antisocial	32.46 ± 15.81
Sadistic	26.54 ± 15.74
Compulsive	53.54 ± 15.34
Negativistic	61.16 ± 10.03
Masochistic	47.28 ± 18.29
Severe personality disorder	-
Schizotypal	27.66 ± 14.93
Borderline	36.42 ± 17.59
Paranoid	43.70 ± 17.30

Table 2. Comparison of MCMI-III domains according to gender

Variable	Males (n=7)	Females (n=43)	P
Severe clinical symptoms			
Thought disorder	53.29 ± 25.83	43.05 ± 21.93	0.27
Major depression	58.14 ± 18.29	49.00 ± 17.62	0.21
Delusional disorder	29.71 ± 25.61	29.95 ± 23.09	0.98
Clinical syndrome			
Generalized anxiety	59.57 ± 4.79	60.60 ± 7.99	0.74
Somatic symptom	57.42 ± 17.04	56.30 ± 15.96	0.86
Bipolar disorder	35.57 ± 28.41	29.20 ± 20.97	0.48
Persistent depression	56.71 ± 6.34	51.72 ± 12.32	0.30
Alcohol use	18.28 ± 10.71	19.44 ± 11.33	0.80

Drug use	17.85 ± 9.15	18.44 ± 10.32	0.88
Post-traumatic stress	45.14 ± 19.84	44.74 ± 17.62	0.95
Clinical personality pattern			
Schizoid	57.28 ± 10.07	52.34 ± 11.97	0.30
Avoidant	50.28 ± 18.23	43.16 ± 18.26	0.34
Melancholic	67.00 ± 11.56	60.76 ± 13.60	0.25
Dependent	44.71 ± 23.72	39.00 ± 21.80	0.52
Histrionic	77.42 ± 13.72	63.88 ± 20.08	0.04
Narcissistic	63.57 ± 20.52	47.72 ± 22.48	0.08
Antisocial	41.57 ± 15.08	30.97 ± 15.59	0.10
Sadistic	30.85 ± 21.07	25.83 ± 14.78	0.44
Compulsive	54.28 ± 19.59	53.41 ± 14.82	0.89
Negativistic	65.42 ± 9.36	60.46 ± 10.06	0.22
Masochistic	45.00 ± 24.61	47.65 ± 17.40	0.72
Severe personality disorder			
Schizotypal	29.71 ± 14.86	27.32 ± 15.08	0.69
Borderline	38.42 ± 18.08	36.09 ± 17.71	0.78
Paranoid	38.71 ± 20.79	44.51 ± 16.81	0.41

Table 3. Comparison of MCMI-III domains according to level of education

Variables	Non-college educated (n=23)	College educated (n=27)	P
Severe clinical symptoms			
Thought disorder	38.74 ± 24.56	49.37 ± 23.51	0.12
Major depression	50.17 ± 17.14	50.32 ± 24.57	0.98
Delusional disorder	32.56 ± 22.89	27.66 ± 36.64	0.58
Clinical syndrome			
Generalized anxiety	60.30 ± 7.97	60.58 ± 10.77	0.91
Somatic symptom	55.95 ± 17.01	56.88 ± 21.35	0.86
Bipolar disorder	30.08 ± 24.18	30.18 ± 30.06	0.99
Persistent depression	53.73 ± 12.34	51.29 ± 14.98	0.53
Alcohol use	20.43 ± 13.97	18.29 ± 13.07	0.57
Drug use	19.56 ± 11.97	17.33 ± 9.88	0.47
Post-traumatic stress	44.34 ± 17.68	45.17 ± 25.41	0.89
Clinical personality pattern			
Schizoid	56.04 ± 9.57	50.47 ± 20.25	0.21
Avoidant	45.39 ± 19.18	43.11 ± 26.21	0.73
Melancholic	62.04 ± 15.26	61.29 ± 17.88	0.87
Dependent	40.65 ± 23.70	39.06 ± 36.07	0.85
Histrionic	64.26 ± 20.80	67.06 ± 21.08	0.63
Narcissistic	46.34 ± 24.36	52.99 ± 28.63	0.38
Antisocial	33.39 ± 18.18	31.66 ± 17.27	0.73
Sadistic	32.17 ± 20.19	21.73 ± 11.16	0.025
Compulsive	55.82 ± 18.32	51.59 ± 14.64	0.37
Negativistic	60.82 ± 11.77	61.44 ± 12.99	0.86
Masochistic	50.39 ± 17.78	44.62 ± 30.01	0.40
Severe personality disorder			
Schizotypal	32.39 ± 18.40	23.62 ± 14.27	0.06
Borderline	40.78 ± 18.15	32.69 ± 26.92	0.21
Paranoid	44.69 ± 17.76	42.84 ± 26.35	0.77

In severe symptoms, including thought disorder, major depression, and delusional disorder, no one had an abnormal score. However, in personality traits, 21 patients (42%) with thought disorder, 14 patients (28%) with depression, and 12 patients (24%) with delusional disorder had a score between 60 and 75. In severe personality disorders, including schizotypal, borderline, and paranoid, no one had an abnormal score. However, 4 patients

(8%) with schizotypal disorder, 6 patients (12%) with borderline, and 12 patients (24%) with paranoid disorder had a score between 60 and 75.

In clinical personality patterns, 5 patients (10%) were melancholic, 8 patients (16%) had histrionic, 1 patient (2%) had narcissistic, 5 patients (10%) had compulsive, 1 patient (2%) had negativistic. One patient (2%) with masochistic disorder had an abnormal score (higher than 85).

In clinical syndromes, the results were as follows: In generalized anxiety, no one had a score higher than 85. Two participants (4%) scored between 75 and 85, and 15 (30%) scored between 60 and 75. Two participants (4%) scored between 75 and 85 with negativistic properties, and 18 (36%) scored between 60 and 75. In the manic pattern, 1 patient (2%) scored higher than 85. One participant (2%) scored between 75 and 85, and 7 (14%) scored between 60 and 75. In persistent depression, 2 participants (4%) had a score between 75 and 85, and 7 participants (14%) had a score between 60 and 75. In the alcohol and drug use patterns, only 1 participant (2%) had a score between 75 and 85, and 1 participant (2%) had a score between 60 and 75. In PTS disorder, no one had a score higher than 85. A score between 75 and 85 was detected in 1 participant (2%), and a score between 60 and 75 was detected in 9 participants (18%).

Discussion

In this cross-sectional study, 50 participants undergoing upper eyelid blepharoplasty were studied to evaluate their personality patterns and psychological profiles. According to the results, 2% of participants in narcissistic, negativistic, and masochistic patterns had an abnormal score (more than 85). In addition, 10% of participants had abnormal scores in melancholic and compulsive disorder as well as 16% had abnormal scores in histrionic patterns. In the histrionic pattern, males had higher scores compared to females. The sadistic personality pattern scored higher among non-college-educated participants than college-educated participants.

This is the first study on personality patterns and psychological profiles of persons undergoing blepharoplasty in Iran. However, there are several studies on related topics worldwide. In a study, the prevalence of cosmetic surgery among a population in western Iran was 12.8%. Ghorbani reported that the frequency of mild to severe mental problems in volunteers of cosmetic surgeries was 65%, according to the general health questionnaire (Goldberg and Hiller). Also, 60.5% of patients had anxiety symptoms, which was unexpectedly high (16). It is inconsistent with our results, which showed clinical personality patterns in a maximum of 16% of participants. However, some studies have reported high levels of self-confidence and moderate levels of self-esteem in patients undergoing plastic surgery (17). von Soest et al. reported that depression, anxiety, and a history of deliberate self-harm predicted prospective cosmetic surgery (18). In another study by Qian et al., the correlation between personality traits and various and different selection sites for cosmetic treatment using the Eysenck Personality Questionnaire (EPQ). They reported that more than 90% of the volunteers were female, and 24% of the population studied tended to undergo cosmetic surgery on their eyes. In addition, there was a significant difference in neuroticism scores between participants with and without cosmetic eye surgery. Qian et al. reported that neuroticism and psychoticism significantly increased the chance of having cosmetic eye surgery. They also reported that the personality profile of patients with cosmetic surgery was more depressed and more anxious (19). In agreement with Qian et al., most of the subjects in our study were female. Nevertheless, the score of general anxiety was higher than that of other clinical syndromes, but none of our participants had a score higher than 85. However, for persistent depression, 18% of participants had a score between 60 and 85, which is not abnormal but needs to be noted and interpreted with caution.

In another study by Gracitelli et al., subjects undergoing upper eyelid blepharoplasty had worsened self-esteem compared to the control group based on the Rosenberg Self-Esteem Scale (20). A recent systematic review of psychological outcomes following cosmetic surgery reported short-term improvements in some psychosocial outcomes after cosmetic surgery, particularly about body–area–specific satisfaction, self-esteem, sexual well-being, and physical well-being (21). According to our literature review and the results of the current study, the abnormal psychological profile of

blepharoplasty volunteers is common, but the frequencies are different. This may be due to the different populations studied, the different sampling methods, the different locations, and the different instruments. The cut-off for the abnormal profile differs in different questionnaires, affecting the results. The treatment of clinical syndromes and abnormal personality patterns may influence the motivation of volunteers to undergo cosmetic surgery. A control group without blepharoplasty is suggested for future research. An assessment of the psychological profile before and after surgery, especially in terms of anxiety, depression, and histrionic personality patterns, may be useful for a better assessment of cosmetic surgery volunteers.

Conclusion

In our study on the personality patterns and psychological profiles of persons undergoing blepharoplasty, there is evidence for some abnormalities in personality patterns, including melancholic, histrionic, and compulsive. No one had any abnormality in severe symptoms or personality disorders, and the frequency of abnormalities in clinical syndromes was very low. More studies are needed to confirm these findings.

Conflict of Interest

The authors declare no conflict of interest. Written consent was obtained from participants.

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Ethical Considerations

All participants knew the study objective and could withdraw at any time. Demographic and clinical information was anonymous and encoded, and it was available only to the researchers. The ethics committee of Mashhad University of Medical Sciences approved the study protocol.

Code of Ethics

IR.MUMS.REC.1395.302

Authors' Contributions

Rahim Saffari, Mohammad Etezad-Razavi: Conception and design; Zanireh Salimi, Elham Bakhtiari: Acquisition and analysis; Rahim Saffari, Mohammad Etezad-Razavi, Zanireh Salimi, Elham Bakhtiari: Drafting the manuscript; Rahim Saffari, Mohammad Etezad-Razavi, Zanireh Salimi, Elham Bakhtiari: Final revision and approval.

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