

Original Research Article

PATIENTS REPORTED PSYCHOSOCIAL FUNCTIONING FOLLOWING SUCCESSFUL PTOSIS SURGERY

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ABSTRACT

Background: Ptosis is a common eyelid disorder that can adversely affect visual function, facial appearance, and psychosocial well-being. While surgical correction is primarily aimed at restoring eyelid position and function, increasing attention has been directed toward understanding patient-reported outcomes following successful ptosis surgery. Psychosocial aspects such as self-confidence, emotional health, social interaction, and satisfaction with appearance are important indicators of overall surgical success but are often underreported in routine clinical assessments. The aim of this study was to evaluate patient-reported psychosocial functioning following successful ptosis surgery in patients treated at a tertiary care hospital.

Materials and Methods: This hospital-based observational study included 52 patients who underwent successful ptosis surgery. Patients of either gender with satisfactory postoperative anatomical outcomes were enrolled. Individuals with recurrent ptosis, craniofacial anomalies, neurological disorders affecting eyelid function, or pre-existing psychiatric illness were excluded. Psychosocial functioning was assessed using a structured, patient-reported questionnaire administered during postoperative follow-up. Evaluated domains included self-confidence, self-esteem, social interaction, emotional well-being, satisfaction with facial appearance, eye contact during communication, and impact on daily activities. Responses were recorded using a Likert-scale format.

Results: The study population comprised 28 females (53.85%) and 24 males (46.15%), with the majority of patients aged between 21 and 60 years. Significant improvement was reported across all psychosocial domains following surgery. Satisfaction with facial appearance showed the highest improvement (90.38%), followed by self-confidence (86.54%) and self-esteem (82.69%). Mean Likert scores for self-confidence, self-esteem, social interaction, and emotional well-being demonstrated statistically significant increases postoperatively ($p < 0.001$). Overall, 88.46% of patients reported being satisfied or very satisfied with the surgical outcome. No significant association was found between gender and overall satisfaction ($p = 0.312$).

Conclusion: Successful ptosis surgery leads to significant improvement in patient-reported psychosocial functioning and high levels of patient satisfaction. These findings underscore the importance of incorporating psychosocial outcome measures alongside anatomical assessments to achieve a comprehensive evaluation of surgical success.

Keywords: Ptosis surgery; Psychosocial functioning; Patient-reported outcomes; Quality of life; Eyelid disorders.

INTRODUCTION

Ptosis (blepharoptosis) is defined as an abnormal drooping of the upper eyelid that may be unilateral or bilateral and can vary in severity from mild lid descent to complete obscuration of the visual axis. The condition may be congenital or acquired, and the underlying mechanism is commonly related to levator dysfunction, aponeurotic dehiscence, neuromuscular disorders, or mechanical causes. Clinically, ptosis is more than a cosmetic concern because it can influence visual performance, facial expression, and interpersonal communication, particularly when the eyelid position alters the perceived symmetry and alertness of the face. Consequently, the goals of ptosis management extend beyond anatomical correction to include improvement in symptoms, daily functioning, and patient-perceived well-being.^[1] From a functional standpoint, upper eyelid droop can reduce the superior visual field and interfere with common activities such as reading, driving, and close work. Patients may adopt compensatory behaviors, including elevation of the eyebrows, chin-up head posture, or frequent eyelid lifting, which can contribute to brow fatigue, frontal headaches, and eye strain. Because functional impairment is not always proportional to eyelid position alone, comprehensive assessment often combines eyelid measurements, symptom history, and documentation of field restriction when appropriate. Functional indications for surgical intervention have therefore been framed around objective parameters and patient-reported disability, reflecting the principle that surgery should address both measurable obstruction and the lived impact of the condition.^[1] Evidence supporting the functional benefit of ptosis repair includes studies demonstrating improvement in superior visual field after correction of acquired blepharoptosis. Field loss may be present in primary gaze and also in reading gaze, which is particularly relevant to complaints of difficulty with near tasks despite otherwise good central vision. Restoration of eyelid height through repair of levator aponeurosis defects has been shown to improve visual field performance in both primary and reading positions, reinforcing the functional rationale for surgical correction when ptosis is symptomatic.^[2] In addition to field expansion, surgery can be associated with clinically meaningful changes in patient-perceived functional status, indicating that functional benefit should be considered alongside anatomical success.^[3] Beyond objective field and eyelid metrics, ptosis affects subjective visual functioning and health-related quality of life. Patients often describe difficulty sustaining visual attention, problems performing tasks above eye level, and limitations in activities requiring prolonged near focus. Patient-reported measures have shown significant postoperative improvements across several vision-related activities and symptoms following ptosis repair, emphasizing

that the perceived benefit may capture important gains not fully reflected by eyelid position alone.^[4] Similarly, quality-of-life assessment using vision-related questionnaires has demonstrated improvement after surgical management of blepharoptosis, including domains that overlap with psychological comfort and daily independence.^[5] These findings support the clinical view that ptosis surgery can be a rehabilitative procedure with tangible patient-centered outcomes. The psychosocial dimension of ptosis is increasingly recognized as a major component of disease burden, particularly in visible facial conditions where appearance influences social interaction. Drooping eyelids can be interpreted by others as tiredness, sadness, reduced attentiveness, or aging, potentially shaping first impressions and interpersonal judgments. Such external perceptions may translate into internal distress, lowered confidence, social self-consciousness, and avoidance behaviors, especially in settings that emphasize eye contact during communication. Research evaluating social perceptions has suggested that individuals with blepharoptosis and dermatochalasis may be viewed more negatively based on facial photographs, and that postoperative appearance may mitigate these biases, implying psychosocial benefits of correction beyond improved visual function.^[6] Despite the acknowledged functional and psychosocial consequences, “successful” ptosis surgery has historically been defined primarily by objective endpoints such as eyelid height, contour, and symmetry. While these parameters are essential, they do not fully capture how patients feel, function, and interact after surgery. Two patients with similar postoperative lid measurements may report very different outcomes depending on baseline expectations, social context, and psychological vulnerability. This gap highlights the importance of incorporating structured patient-reported outcomes into ptosis research and clinical audit, allowing surgeons to evaluate whether anatomical correction translates into meaningful improvement in psychosocial functioning. Patient-reported outcome measures (PROMs) provide a standardized approach to quantify aspects such as satisfaction with appearance, social confidence, emotional well-being, and treatment experience. Contemporary instruments designed for periorbital interventions, including modules that assess the appearance of the eyes and eyelids and associated adverse effects, enable outcome reporting that reflects the patient perspective with greater rigor and comparability across studies and clinical settings.^[7] Using PROM-informed frameworks also strengthens shared decision-making by aligning surgical goals with patient priorities, clarifying expected benefits, and identifying domains where additional counseling or support may be needed.

MATERIALS AND METHODS

This hospital-based observational study was conducted at a tertiary care hospital to assess patient-reported psychosocial functioning following successful ptosis surgery. The study focused on evaluating subjective outcomes related to psychological well-being and social functioning after surgical correction of ptosis, emphasizing patient perception rather than purely anatomical results. A total of 52 patients who underwent successful ptosis surgery were included in the study. Patients of either gender who had achieved satisfactory postoperative surgical outcomes, as determined by clinical assessment, were enrolled. Individuals with recurrent ptosis, associated craniofacial anomalies, neurological disorders affecting eyelid function, or pre-existing psychiatric illness were excluded to minimize confounding factors influencing psychosocial assessment.

Methodology: Patient-reported data were collected using a structured questionnaire administered during postoperative follow-up. Psychosocial functioning was evaluated across multiple domains, including self-confidence, self-esteem, social interaction, emotional well-being, satisfaction with facial appearance, perception of eye contact during communication, and impact on daily activities. Responses were recorded using a Likert-scale format to quantify subjective improvement in psychosocial parameters following surgery. The primary outcome measure was improvement in psychosocial functioning as perceived by the patients after ptosis surgery. Secondary outcomes included patient satisfaction with surgical results and perceived changes in social and emotional behavior. Successful ptosis surgery was defined based on acceptable eyelid height, symmetry, and absence of significant postoperative complications, as documented in clinical records.

Statistical Analysis: Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0. Descriptive statistics were used to summarize demographic characteristics and psychosocial outcomes. Continuous variables were expressed as mean and standard deviation, while categorical variables were presented as frequencies and percentages. Appropriate statistical tests were applied to assess associations between demographic variables and psychosocial outcomes, with a p-value of less than 0.05 considered statistically significant.

RESULTS

The demographic characteristics of the study population are summarized in [Table 1]. A total of 52 patients who underwent successful ptosis surgery were included in the analysis. Females constituted a slightly higher proportion of the study population, accounting for 53.85%, while males represented 46.15% of the patients. With regard to age distribution, the majority of patients were in the 21–40 years age group (36.54%), followed by those aged 41–60 years (32.69%). Younger patients aged 20 years or below and older patients above 60 years each constituted 15.38% of the study population.

Patient-reported improvement in psychosocial domains following ptosis surgery is detailed in [Table 2]. A marked improvement was observed across all evaluated domains. The highest level of improvement was reported in satisfaction with facial appearance, with 90.38% of patients noting a positive change. Improvement in self-confidence was reported by 86.54% of patients, while 82.69% experienced enhancement in self-esteem. Social interaction improved in 78.85% of patients, and emotional well-being improved in 75.00%. Additionally, 84.62% of patients reported better eye contact during communication, and 76.92% experienced improvement in performing daily activities.

[Table 3] presents a comparison of mean psychosocial scores before and after surgery using a Likert scale. Statistically significant improvements were observed in all assessed parameters. The mean self-confidence score increased from 2.38 ± 0.74 preoperatively to 4.12 ± 0.63 postoperatively ($p < 0.001$). Similarly, self-esteem improved from a mean score of 2.44 ± 0.71 to 4.05 ± 0.66 ($p < 0.001$). Social interaction scores showed a significant rise from 2.51 ± 0.69 to 3.98 ± 0.68 ($p < 0.001$), while emotional well-being improved from 2.60 ± 0.73 to 3.90 ± 0.70 ($p < 0.001$).

Overall patient satisfaction with surgical outcomes is illustrated in [Table 4]. A majority of patients reported high satisfaction levels, with 61.54% being very satisfied and 26.92% satisfied with the surgical results. Only a small proportion of patients expressed neutral (7.69%) or dissatisfied (3.85%) responses. Collectively, 88.46% of patients reported being satisfied or very satisfied, reflecting favorable patient perception of surgical success.

The association between gender and overall satisfaction following ptosis surgery is shown in [Table 5]. Among male patients, 83.33% reported satisfaction, while 92.86% of female patients were satisfied with the surgical outcome. Although a higher proportion of females reported satisfaction compared to males, the difference was not statistically significant ($p = 0.312$).

Table 1: Demographic Characteristics of the Study Population (n = 52)

Variable	Frequency (n)	Percentage (%)
Gender		
Male	24	46.15
Female	28	53.85
Age Group (years)		
<20	8	15.38
21–40	19	36.54
41–60	17	32.69
>60	8	15.38

Table 2: Patient-Reported Improvement in Psychosocial Domains After Ptosis Surgery (n = 52)

Psychosocial Domain	Improved n (%)	Not Improved n (%)
Self-confidence	45 (86.54)	7 (13.46)
Self-esteem	43 (82.69)	9 (17.31)
Social interaction	41 (78.85)	11 (21.15)
Emotional well-being	39 (75.00)	13 (25.00)
Satisfaction with facial appearance	47 (90.38)	5 (9.62)
Eye contact during communication	44 (84.62)	8 (15.38)
Daily activities	40 (76.92)	12 (23.08)

Table 3: Comparison of Mean Psychosocial Scores Before and After Surgery (Likert Scale)

Parameter	Preoperative Mean ± SD	Postoperative Mean ± SD	p-value*
Self-confidence	2.38 ± 0.74	4.12 ± 0.63	<0.001
Self-esteem	2.44 ± 0.71	4.05 ± 0.66	<0.001
Social interaction	2.51 ± 0.69	3.98 ± 0.68	<0.001
Emotional well-being	2.60 ± 0.73	3.90 ± 0.70	<0.001

*Paired t-test applied

Table 4: Patient Satisfaction With Surgical Outcome (n = 52)

Satisfaction Level	Frequency (n)	Percentage (%)
Very satisfied	32	61.54
Satisfied	14	26.92
Neutral	4	7.69
Dissatisfied	2	3.85

Table 5: Association Between Gender and Overall Satisfaction After Surgery

Gender	Satisfied n (%)	Not Satisfied n (%)	p-value†
Male (n = 24)	20 (83.33)	4 (16.67)	
Female (n = 28)	26 (92.86)	2 (7.14)	0.312

DISCUSSION

In the present cohort (n=52), females represented 53.85% and the largest proportion of patients were aged 21–40 years (36.54%), indicating that cosmetically and socially relevant concerns may influence care-seeking in a relatively younger adult population. This age profile differs from the older case-mix reported by Maycock et al (2015), where 44 patients undergoing ptosis surgery had a median age of 77 years (range 17–95) and a similar female predominance (24/44; 54.55%), suggesting that referral patterns, ptosis aetiology, and service setting can substantially shape the demographic spectrum.^[8] Overall satisfaction in our study was high (very satisfied 61.54%, satisfied 26.92%; total satisfied/very satisfied 88.46%), while dissatisfaction was uncommon (3.85%). These findings are directionally consistent with large surgical series demonstrating very high satisfaction after ptosis correction; for example, Pan et al (2020) reported that 427/450 patients (94.90%) were satisfied, 18/450 (4.00%) were partly satisfied, and 5/450 (1.10%) were not satisfied following correction of mild-to-

moderate blepharoptosis, alongside objective improvement in eyelid position (MRD1 1.7±0.5 mm to 3.7±0.4 mm).^[9]

The strongest patient-reported gain in our cohort was satisfaction with facial appearance (90.38% improved), accompanied by substantial improvement in self-confidence (86.54%) and self-esteem (82.69%), supporting the concept that ptosis correction confers benefits beyond eyelid height alone. Comparable appearance-linked psychosocial gains have been documented in eyelid surgery populations; Papadopoulos et al (2019) found that after blepharoplasty, 44/46 participants (95.65%) reported a positive influence on personal wellbeing, 33/46 (71.74%) were more satisfied with appearance, and 20/46 (43.48%) felt more self-confident—figures that, while procedure- and population-specific, reinforce the importance of appearance satisfaction as a driver of perceived psychosocial recovery.^[10]

When psychosocial change was quantified in our study, mean Likert scores improved significantly across domains (self-confidence 2.38±0.74 to 4.12±0.63; self-esteem 2.44±0.71 to 4.05±0.66; social interaction 2.51±0.69 to 3.98±0.68; emotional well-being 2.60±0.73 to 3.90±0.70; all p<0.001).

Using validated psychological scales, Richards et al (2022) similarly demonstrated significant postoperative improvement after successful ptosis surgery, including reduced appearance-related social distress (DAS24: 30.94 to 23.67; $p=0.003$), reduced anxiety (HADS-A: 7.6 to 4.9; $p<0.001$), reduced fear of negative evaluation (34.79 to 31.26; $p=0.024$), and an overall positive benefit to well-being in 85% of patients, aligning with the broad psychosocial gains reported by our participants.^[11]

Our high rates of improvement in social interaction (78.85%) and emotional well-being (75.00%), together with the large satisfied/very satisfied proportion (88.46%), are consistent with evidence that ptosis repair yields measurable quality-of-life benefit at the patient level. Smith et al (2012), using the Glasgow Benefit Inventory (GBI), reported a mean total GBI score of +24.89 (95% CI 20.04–29.73; $p<0.001$) specifically for ptosis repairs, demonstrating a significant post-intervention quality-of-life gain that complements our patient-reported improvements in confidence, social functioning, and satisfaction.^[12]

Functional and interactional improvements were also prominent in our cohort: 84.62% reported improved eye contact during communication and 76.92% reported improvement in daily activities, suggesting that correction of lid position may reduce social self-consciousness while also easing task performance. Vision-related QoL studies support this combined functional–psychosocial pathway; Briceño et al (2016) reported significant improvement in NEI-VFQ-9 composite scores in the ptosis-only group from 72.07 preoperatively to 86.41 postoperatively ($p=0.004$), indicating better perceived visual function after surgery, which plausibly contributes to more comfortable day-to-day activity and interpersonal engagement similar to what our patients described.^[13] In our gender-stratified analysis, satisfaction was numerically higher in females (92.86%) than males (83.33%), but this difference was not statistically significant ($p=0.312$), implying broadly comparable perceived benefit between genders in this adult cohort. In contrast, Hasbi et al (2024) reported in children with congenital ptosis that age, sex, and parental education level significantly affected change in social anxiety following ptosis surgery ($p<0.05$), highlighting that demographic modifiers—particularly sex—may influence psychosocial trajectories more detectably in paediatric or family-mediated contexts than in adult satisfaction outcomes such as ours.^[14]

Finally, while our analysis captured clear postoperative psychosocial benefit, interpretation should consider that patient-perceived outcomes can vary with time from surgery and patient characteristics. Mahroo et al (2014) evaluated 50 patients (mean age 63.0 years) at a mean of 35.6 months after surgery and reported that measured benefit decreased with increasing time since surgery and increased with age on univariate analysis, although no determinants remained significant on

multivariate modelling an important reminder that sustained psychosocial impact may not be uniform, and future work with standardized follow-up intervals could refine understanding of durability in benefits observed in cohorts like ours.^[15]

CONCLUSION

Successful ptosis surgery resulted in significant improvement in patient-reported psychosocial functioning, including enhanced self-confidence, self-esteem, social interaction, and emotional well-being. A high level of overall patient satisfaction was observed, reflecting positive perception of both functional and aesthetic outcomes. These findings highlight that ptosis correction offers substantial psychosocial benefits in addition to anatomical success. Incorporating patient-reported outcome measures into routine evaluation may provide a more comprehensive assessment of surgical effectiveness.

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