'Pre-Operative Experiences and Post-Operative Benefits of Ptosis Surgery: A Qualitative Study.'

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Abstract

This qualitative study sought to explore the experiences of patients who had undergone successful ptosis correction surgery. Participants were recruited from Bristol Eye Hospital. Nine participants were interviewed using a semi-structured interview schedule and open ended questions. Data were analysed using Inductive Thematic Analysis. Four major themes were identified from patient accounts. Patients described the psychosocial and functional difficulties they experienced living with ptosis, and the subsequent benefits of surgery. Patients reported experiencing appearance related anxiety pre-operatively due to their condition and engaging in behaviours to avoid social encounters. Gender differences were noted in the internalization of perceived negative reactions from others, with men describing fewer adverse impacts. Patients described perceived barriers to seeking surgery including a lack of awareness of ptosis as a treatable condition, the perception that being concerned with their appearance could be seen as vain and the view that ptosis surgery is synonymous with cosmetic surgery. Following successful surgery patients outlined positive impacts on their vision, appearance and psychosocial well-being after successful surgery. This qualitative study highlights the complexities of the factors and processes contributing to the psychosocial impacts of ptosis and the potential benefits of surgery and/or psychosocial support. An increased awareness amongst people with ptosis of the potential positive impacts of surgery and an enhanced understanding of the reasons why patients may not seek treatment amongst health care professionals are likely to benefit this often overlooked patient group.

Introduction
Ptosis is a condition which involves the drooping of one or both eyelids. This can have negative impacts on vision and facial appearance. Ptosis correction is generally a straightforward and successful oculoplastic procedure. However, there is well documented stigma associated with treatments perceived to be ‘cosmetic’. Western media portrays plastic surgery procedures as primarily ‘aesthetic’ and under-represents the complexities involved in undertaking reconstructive surgery(1). Research also suggests that journalists tend to perceive plastic surgery as being synonymous with cosmetic surgery(2), with the terms ‘aesthetic’, ‘cosmetic’ and ‘plastic surgery’ being used interchangeably(3).

These misconceptions may also extend to medical professionals. Clarke(4) highlighted a general misperception within the NHS concerning plastic surgery and cosmetic procedures. GPs and medical students perceived plastic surgery to be associated with the treatment of aesthetic conditions to a greater extent than reconstructive procedures such as hand surgery(5). This finding is concerning, as general practice is often the route for patients to access reconstructive treatments(6), (7). In addition, access to corrective plastic surgery procedures varies between Trusts. Within oculoplastics, there are widespread inconsistencies across NHS Clinical Commissioning Groups (CCGs) in relation to the purpose of surgery for ptosis, and the criterion by which treatment is commissioned. Some CCGs perceive ptosis surgery as an aesthetic procedure and will not commission it under any circumstances(8). Others state they will not commission ptosis surgery for cosmetic reasons, but will do so where there is objective evidence of impairment to visual fields(9) (10) (11), with some using specific eligibility criteria for treatment, for example, the upper margin reflex distance and degree of eyelid asymmetry(12).
Previous research into the impact of ptosis and other conditions affecting the appearance of the eyes (13) (14) (15) demonstrates negative impacts of these conditions due to the psychosocial effects of living with an appearance altering condition, and suggests that patients with ptosis may be motivated to seek surgery to ameliorate the psychological impacts as well the functional concomitants of the condition (15) (13). The withholding of ptosis surgery on the grounds that it is a cosmetic procedure and is therefore unworthy of funding risks denying treatment to patients experiencing significant reductions in quality of life (QOL) as the result of the condition. Differences in commissioning practices and the likelihood that surgical intervention is being withheld from those who may benefit, highlight the need for an in-depth exploration of the psychological and social impacts of ptosis and the extent to which surgery can have psychological benefits.

This study sought to explore patients experiences in their own words as those who have undergone ptosis surgery are ideally placed to provide data on the benefits or otherwise of treatment, the impacts of ptosis on psychosocial functioning prior to treatment and the motivations for seeking treatment. The success of ptosis surgery is generally assessed by surgeons using objective measures of outcome including cosmesis (16) (17) (18). Subjective patient reported outcomes are rarely reported with the majority of existing outcome studies focusing on functional improvements and changes to quality of life as the result of enhancing visual functioning (19) (20). Although one study has examined the psychosocial impact of ptosis using open ended questions to explore patient accounts in their own words to gain greater understanding of the needs of affected groups (21), this study focused on ptosis as a symptom of Myasthenia Gravis. Further insight into patient reported motivations for
treatment and outcomes is necessary to inform efforts to improve understanding of
ptosis and the potential benefits of treatment. Qualitative methods offer the best
means of providing in depth data from the patient perspective (22) and findings from
person-centered methodologies are recognised as key, in conjunction with
subsequent broader scale quantitative work, in informing patient care. (23).

This study aims to address the current gap in understanding by gathering qualitative
interview data to explore patients' motivations for seeking treatment, the impact of
ptosis surgery in terms of changes from pre-operative state and factors contributing
to individual differences in these processes, in order to improve current
understanding of patients' experiences of ptosis surgery and to inform
commissioning and provision of care.

**Materials and Method**

**Design**

Semi-structured interviews were conducted as this format offers the flexibility
necessary to explore the individual perspectives, whilst maintaining the focus of data
collection in relation to the aims of the study. Topics were developed following an
earlier online study (13), in which people with ptosis were consulted about the
development of this and related studies. Questions included “How did your ptosis
affect you day-to-day? Has this changed since your surgery?” In line with sampling
guidance from Braun & Clarke (24) interviews were conducted until no new concepts
were identified. This approach ensures a broad range of data is collected and is
widely used in health science research (25). Due to the labour intensive and in-depth nature of qualitative research and the amount of data generated by each participant, smaller sample sizes are used compared to quantitative studies, with a sample size between 6 and 14 considered appropriate for inductive qualitative research of people with a specific health condition (26), (25) (24).

**Participants**

Adult patients were recruited from the Bristol Eye Hospital. Participants were eligible to participate if they were over 18, had unilateral or bilateral ptosis and were fluent in English. Patients were approached post-operatively, and interviews were conducted in the clinic setting, immediately following their final post-operative appointment. Nine patients were interviewed. Four participants were female, ages ranged from 24-75 years old (mean=63). Five patients had unilateral ptosis, four had bilateral ptosis. For eight patients surgery was undertaken primarily to improve vision. One patient had surgery because of discomfort due to ptosis. All patients underwent levator aponeurosis repair or advancement procedures. Two patients required a repeat procedure due to poor initial results. All patients’ results were described as ‘very good’, ‘symmetrical’ or ‘with no further surgery needed’ at discharge.

**Data analysis**

Interviews were recorded and transcribed verbatim. Inductive Thematic Analysis was used to analyse the data in accordance with six-step guidelines described by Braun & Clarke (27). Transcribed interviews were read and re-read to ensure in-depth
familiarity with the data, allowing patterns in the data to be observed and coded. Codes were then grouped together into themes and associated sub-themes and verified by two researchers to ensure accuracy.

Ethical statement

Ethical approval was obtained from the host NHS Trust and University Research Ethics Committee. All participants volunteered to take part after giving full informed consent and were reminded of their right to withdraw at any point, and the arrangements for confidentiality of the data obtained. Pseudonyms have been used to protect participant identity. All investigations were conducted in accordance with the Declarations of Helsinki.

Results

Four themes were identified; Appearance Related Anxiety & Behaviours, Lack of Awareness of Ptosis as a Treatable Condition, Appearance Concern as Vanity and the Stigma of Cosmetic Surgery and Seeing Better and Feeling Better. The themes and sub-themes are outlined below.

Theme 1: Appearance Related Anxieties and Avoidant Behaviours: “All they are going to see is the eye”: 
Patients discussed the psychosocial impact of ptosis prior to treatment, reporting negative impacts on self-esteem and self-confidence, increases in levels of self-consciousness, changes to self-image and withdrawal from social situations. Patients described difficulties in social interactions, attributing this to the reactions of other people to their ptosis. Various behavioural strategies were described to manage the responses of others and their own feelings about their ptosis. These included forms of camouflage (for example, wearing dark glasses), avoiding photographs and reducing eye contact. These are strategies reported in other studies as typical of those with higher levels of social anxiety and lower self-esteem and of those who anticipate negative reactions from others to their appearance\(28\) \(29\) \(30\).

\(M; 27\) “I worked out…an actual sort of angle I could look [at the camera]…so it looks normal. So if someone starts to take a photo I [had to] say hang on a minute, I've got to turn around a bit.”

Differences were apparent in how male and female patients expressed the nature and impacts of their appearance concerns. Women reported a greater level of worry about how they were perceived by other people and also described the ways in which ptosis affected their perceptions of themselves and their self-referent emotions. Both of these aspects were reported as negatively impacting their self-esteem. Men were similarly concerned about the perceived negative judgements made by others, but did not appear to internalize these to the same extent as women. While men reported experiencing varying levels of social anxiety and
employing techniques to disguise the condition such as avoiding eye contact or
camouflaging their eyes, they did not report negative consequences for their self-
perceptions or emotional well-being.

(F; 62) “Because the result [of ptosis] was a one eyed monster. I looked absolutely
horrrendous in photographs…If I looked in the mirror I’d think oh God, you’re
hideous.”

(M; 24) “Once they noticed it once, they’d notice it all the time…Obviously it did affect
my confidence slightly, yes because I never used to like having a conversation with
someone – I used to feel rude because I’d keep, I’d sort of look away so they
wouldn’t notice.”

The differences in the accounts of male and female participants’ accounts may have
been influenced by broader social expectations. Men may have felt less able to
express any psychological impact of ptosis, downplaying any emotional
consequences and choosing instead to place the emphasis on the influence of the
condition on their behaviour in social situations.

**Theme 2 Lack of Awareness of Ptosis as a Treatable Condition:** “I’d never even
heard the word ptosis.”

Although all participants reported a variety of problems with their eyes pre-
operatively, most were unaware of ptosis as a condition or available treatments prior
to their diagnosis. Over half of participants had been referred for surgery by their optician, having previously believed that their ptosis was due to an untreatable anomaly or the aging process. This raises the possibility that other potential patients may also be unaware that they have a condition for which treatment is available.

(F; 66) “Never ever thought that I could have anything done. It was only the optician that referred me on."

(F; 62) “It was after I’d been to the opticians because I’d never even heard the word ptosis, let alone know I’d got it. And – oh I haven’t got a droopy eye, I’ve got a condition! And so just being told that actually made me feel better.”

Theme 3 Appearance Concern as Vanity and the Stigma of Cosmetic Surgery:

“I don’t do cosmetic surgery…”

When discussing their pre-operative appearance concerns, female participants tended to present these as ‘vain’ and/or ‘trivial’, despite far-reaching psychosocial impacts. To counter this, when describing their treatment to others, they insisted that their treatment had not been ‘cosmetic’ surgery. In some cases, this perceived stigma of ‘cosmetic’ surgery had prevented patients from seeking treatment earlier, even when ptosis had caused major impacts to their lives. Some female participants felt the need to excuse their appearance concerns, even though these had been a significant driver in their desire for treatment.
(F; 62) “Oh, I hated [ptosis]...But I would never have gone to the doctor. I just assumed it was cosmetic surgery and that was vanity and that was tough...Because I would have gone on believing it was cosmetic surgery and I wouldn't entertain it...I've been waiting for someone to make a comment about me having had cosmetic surgery and I'm ready for them!...I don't do cosmetic surgery, I don't believe in it.”

Regardless of gender, perceptions of surgery as cosmetic were cited as a main factor in some participants decision-making regarding treatment, even where negative impacts of the condition upon vision, appearance and/or well-being were reported as significant.

(M; 69) “I said I didn't want it done for cosmetic purposes, but if they thought it would improve my vision, yes I wanted it done.”

Some patients did not initially raise appearance changes as problematic, but in further discussion revealed that the appearance element of ptosis had affected them socially and/or emotionally. Similarly, when discussing the impacts of surgery, some reported that improvements to appearance were of the greatest benefit, whereas others wove functional and appearance aspects together. A reluctance to verbalise appearance either as a prime motivator and/or the most positive consequence of treatment was evident in several participants' accounts, even though the importance of these issues was implied on many occasions.
The decision to seek treatment was more complex and multifaceted for some participants. This was particularly true for females, who discussed many factors contributing to their decision making, including their own opinions regarding cosmetic surgery, a reluctance to admit their concern about their eye appearance, a lack of knowledge of treatment, and the extent to which ptosis had impacted on their quality of life.

(F; 62) “And I said ‘What’s the point [of going to the GP]. It’s cosmetic surgery. And I’d written it off…as far as I was concerned it was part and parcel of the aging process.”

Theme 4; Seeing Better and Feeling Better: “Getting back to the real world again”:

All participants reported significant benefits following surgery, with no negative consequences after the initial post-operative recovery. Reports of functional improvements included better visual acuity, with many able to engage in daily tasks which had been hindered by their ptosis.

For the minority of patients, the functional gains were perceived to be the major benefit of treatment. However, many participants described improvements in other domains of life following surgical intervention, regardless of the extent to which deficits in vision had existed pre-operatively.
Objective factors such as the age of the participant and the severity of their ptosis did not appear to be strongly related to participants’ perceptions of the post-operative gains from ptosis surgery. Instead, those who reported the greatest benefits from treatment were those who reported significant negative impacts on their psychological well-being prior to surgery, in particular those with concerns about their appearance which had resulted in negative changes to self-image, self-consciousness, social anxiety or social avoidance.

(M; 24) “I used to try not to look at people square on for too long in case they noticed it [ptosis]… [Surgery has] made me feel more confident when I’m going out, speaking to people. I’ll speak to them square on now and not sort of edge away or try to make the conversation short so they don’t notice it.”

(M; 62) “[I can] talk to them now. Because I work in a place where there’s probably about seventy or eighty other staff, so I’ve got no problems with it at all now.”

(F; 62) “I wasn’t that aware of [restricted vision due to ptosis] because my right eye has never been good…I’m not ready to be old…[ptosis] was going to be the one thing that was going to pull me kicking and screaming into being an old lady.”

Discussion
This study demonstrates that participants had experienced a range of negative impacts prior to surgery including functional deficits and compromised psychosocial well-being. Despite these impacts, several participants reported being reluctant to seek treatment due to concerns that others (including doctors) might perceive treatment as a ‘cosmetic’ procedure. The findings also illustrate the extent to which successful ptosis surgery can result in a range of positive patient reported outcomes, such as restoring social functioning and confidence, in addition to visual function.

Many of the psychosocial challenges associated with ptosis reflect those reported in studies of conditions which affect the appearance of the eye area(14) (15) (21). In this study, the majority of participants reported engaging in one or more of a variety of ‘safety behaviours’(31) designed to minimize the noticeability of their ptosis to others and to protect themselves from possible negative reactions to their appearance. These included various forms of camouflage, minimizing eye contact, turning their head away, or shortening the length of their interactions with others.

Previous research has highlighted that a variety of emotional and psychological processes can result in differences in the experiences of patients with appearance altering conditions(32) (33). These include variation in the degree of importance placed on the opinions of others and the extent to which appearance forms a part of an individual’s self-concept and self-esteem(34). In this study, the most notable differences related to gender. Female participants reported greater pre-operative negative emotional impacts of ptosis than men, with women detailing how the condition impacted both their self-perceptions and their perceptions of how others viewed them. However, this may be due to gender differences in reporting rather
than to actual experience, with similarities to Cahill & Mussap’s(32) findings that exposure to images of idealized body shapes had negative impacts on both genders, but only women reported an emotional impact. Previous research has also highlighted gender differences in symptom reporting more generally. It is well established that women report more numerous and more severe symptoms than men, regardless of cause(35). These differences in disclosure have been attributed to differences in male and female socialization and social roles(36) and to a reluctance in men to admit how important their health and physical appearance are to them(37). While these societal pressures and gendered factors may to some extent explain the differences in reporting of pre-operative emotional consequences of appearance concerns raised by participants in this study, no marked differences between males and females were noted in terms of how they reported behavioural responses to ptosis. In contrast, participants of both genders reported significant post-operative benefits in visual functioning and psychosocial wellbeing. While some reported improved vision as the major post-operative benefit, for many functional improvements were secondary to the psychosocial benefits experienced following successful surgery. These participants felt more confident in engaging socially without experiencing social anxiety or anticipating negative attention or unsolicited comments. The results clearly demonstrate that the benefits of ptosis treatment extends beyond objective visual function, and can have a significant psychosocial benefits. As this is a qualitative study with a small participant study, further research is necessary to investigate gender differences in pre and post-operative reporting more fully.
An interesting finding was that pre-operatively, some participants had thought of treatment for ptosis as 'cosmetic', and that this had posed a potential barrier to treatment. Similar themes have been found in patient accounts in relation to treatment decision making following mastectomy. Some women expressed concerns that others might perceive the choice to undergo breast reconstruction as self-indulgent and vain (38) (39), while others have reported regrets after reconstructive surgery, as they felt they had made their decision for superficial reasons (40). The view that 'plastic' surgery is synonymous with cosmetic surgery rather than with reconstructive or restorative procedures is widespread within the media (1) (2) and may be prevalent in some fields of medicine (41). British GPs’ knowledge of plastic surgery is limited by their lack of exposure to this specialty during training (42). Furthermore, many types of eye surgery, (including for example, corrective procedures for strabismus), have also been perceived to be ‘cosmetic’ procedures, even within the eye care community itself (43). Therefore, the findings that this perception may be shared by patients is unsurprising.

As previously noted, misconceptions are evident in resource allocation within the NHS with marked regional variation (44). Currently, there are no published guidelines regarding treatment criteria for ptosis. The physical parameters employed by some CCGs to determine eligibility for treatment for conditions resulting in an unusual appearance fail to reflect the often considerable psychological and social impacts of appearance altering conditions. In the context of ptosis, the allocation of resources using only criteria relating to functional deficits fails to acknowledge the levels of
distress experienced by many in response to these challenges (45) (46) (19) and the potential gains in quality of life through the restoration of eyelid symmetry and an unremarkable appearance.

**Limitations of the study**

This is the first qualitative study which has explored patients’ motivations for seeking treatment for ptosis, the impact of ptosis surgery and factors contributing to individual differences in these processes in order to improve current understanding of patients' experiences of ptosis surgery. In keeping with the qualitative design of this study, interviews were conducted to the point at which no new concepts were identified from the interview transcripts (47). This approach is especially useful when investigating under-researched topics for which it is inappropriate to assume a pre-determined sample size. However, larger scale, quantitative research is necessary to confirm the findings of this study in the broader population of patients undergoing treatment for ptosis, particularly given that participants were recruited from one UK site. It is possible that participants reported experiences are unique to this particular patient group, or a reflection of the management of ptosis in one healthcare Trust. As the inability to generalize results in any way other than a speculative form is a feature of qualitative research in all forms, further, larger scale research is necessary to underpin future recommendations to inform commissioning and practice.

**Conclusion**
In conclusion, all participants in this study reported positive gains following successful ptosis surgery, including functional and psychosocial improvements. The restoration of symmetrical eyelids led to improvements in confidence and self-esteem, particularly in social situations. This study contributes to the growing body of evidence attesting to the value of ptosis surgery in improving the function of the eyes and psychosocial well-being of patients.

However, significant barriers to seeking treatment were cited, including a lack of knowledge amongst potential patients and professionals about ptosis as a diagnosable condition and the availability of corrective surgery. In addition, the belief that requests for treatment might be interpreted as a desire for a cosmetic procedure and the potential stigma associated with seeking treatment for reasons of vanity had resulted in significant delays in seeking professional advice. Raising awareness amongst those professionals who are the gatekeepers to referrals for assessment for surgery (such as opticians and GPs) might go some way to reducing these barriers.

Finally, given that the results of this study suggest that surgery to correct ptosis results in significant improvements in both function and quality of life. As such,, further larger scale studies are warranted with a view to informing recommendations to Commissioners in relation to this intervention.

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Declaration of Interest

The authors declare no conflict of interest.
References


38. Reaby LL. Reasons why women who have mastectomy decide to have or not to have breast reconstruction. Plastic and reconstructive surgery. 1998;101(7):1810-8.
43. Kraft SP. Adult strabismus surgery: more than just cosmetic. Canadian journal of ophthalmology.
47. Schensul JIL, M. D. Designing and conducting ethnographic research: An Introduction. Walnut Creek, CA: Altamira Press; 2010.