

FEAR OF BLINDNESS IN PATIENTS UNDERGOING CATARACT SURGERY

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SUMMARY

Background: Fear is a negative emotion induced by the threat of danger, pain and harm. Cataract surgery is one of the most performed surgeries in the world. The aim of this study was to investigate and analyze the predominant fears in patients undergoing cataract surgery.

Subjects and methods: In this cross-sectional study 152 patients were examined. Self-designed questionnaires to examine emotions of the fear, anxiety, nervousness frequency gratitude was used and insecurity immediately before cataract surgery. We also examined what the greatest fear during the cataract surgery was. The fear of blindness was compared with other life fears such as cancer, memory loss, AIDS, stroke and heart attack. The presence of fear was compared in patients having had previous cataract surgery with those undergoing their first cataract surgery. Including criteria were adults with senile cataract. Excluding criteria was ocular co-morbidity, psychiatric disorders, inability to read, deafness and surgery under general anesthesia. Completed questionnaires were analyzed. Pearson's chi-squared test was used.

Results: Fear was the most frequent emotion before cataract surgery, present in 60.5% patients. Fear of blindness was the greatest fear during cataract surgery in 55.3% of patients. There was no statistically significant difference in fear in patients having undergone their first cataract surgery and patients before their second cataract surgery ($p < 0.05$).

Conclusion: Fear is the predominant emotion before cataract surgery which is in correlation to the leading life fear - fear of blindness. Good preoperative preparation and a trusting doctor-patient relationship are important for reducing the fear of the procedure.

Key words: fear - blindness - cataract

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INTRODUCTION

Fear is an emotion induced by the threat of danger, pain, harm or other unpleasant emotions. Cataract surgery is the most commonly performed surgery in the world. Visual disorders are a major public health problem, because they cause disability, suffering, and loss of productivity. Visual impairment like blindness has a significant impact on the aging population's well-being (Nyman et al. 2012).

Vision has always been considered the most important human sense and its loss brings various degrees of emotional suffering. There are four types of responses to blindness described in literature: acceptance, denial, depression and anxiety (Adams & Pearlman 1970, Foggitt 2001, Öhman 2000). Patients undergoing cataract surgery tend to show negative emotions such as fear or anxiety (Öhman 2000). Some studies indicated that cataract patients can experience anxiety before surgery, during

and in some period of time after surgery (Fagerström 1993, Foggitt 2001, Nijkamp et al. 2002). Information about medical procedures is one of the most important factors regarding patient satisfaction and the reduction of anxiety (Pager et al. 2004). The ophthalmologist plays the most important role in preparing patients for cataract surgery and establishing a sense of psychological stability in the patient (Henderson et al. 2014). Therefore, the aim of this study is to identify the greatest fear in patients undergoing cataract surgery.

SUBJECTS AND METHODS

A cross-sectional study was performed from September 2019 to February 2020 in Zadar General Hospital at Department of Ophthalmology. The study was approved by General Hospital Zadar Ethics Committee. The participants gave informed consent and patient anonymity was preserved.

Participants

This study included a total of 152 patients undergoing cataract surgery, who underwent phacoemulsification with intraocular lens implantation under local anesthesia. Consistently all patients were informed of the medical procedures one week preoperatively.

Including criteria were adults with senile cataract. Excluding criteria was ocular co-morbidity, psychiatric disorders, inability to read, deafness and surgery under general anesthesia.

Instruments

Self-designed check-list was used, comprised of data that reflect specific emotions patients experience immediately before cataract surgery. We examined emotions that included fear, nervousness, anxiety, insecurity and gratitude. Questions about fear of surgery included the fear of blindness, fear of pain, having anesthesia, and of the face cover with the sterile overlay. Also, we compared the fear in patients having had previous surgery on the fellow eye with those undergoing cataract surgeries for the first time.

The fear of blindness was assessed in comparison to cancer, AIDS, brain stroke, hearts attack and memory loss.

Statistical Analysis

Completed questionnaires were analyzed and a Pearson's chi-squared test was used to analyze the results. Statistical significance was set at $p < 0.05$.

RESULTS

The mean age of the participants was 74.41 years. Younger than 65 were 20 (13.2%) participants and 86.8% participants were older than 65 years. 88 patients (57.9%) were women and 64 (42.1%) were men (Table 1). Previous cataract surgery on the fellow eye had 68 patients (44.7%) and 84 patients (55.3%) underwent first time cataract surgery (Table 2).

The most common emotion prior the cataract surgery was fear in 60.5% and it was twice as frequent in women. Fear frequency was present in patients in both groups according to age (older and younger than 65). Fear was followed by anxiety (18.4%), which in frequency was the next present emotion in both genders; nervousness (13.1%), 4 times more frequent in women; gratitude (7.9%), twice as common in men and insecurity (5.2%) only present in the male (Table 2).

During cataract surgery patients have the fear of blindness in 55.3% equally in both genders; fear of pain in 34.2%, 3 times more frequent in women; fear of anesthesia in 7.9%, only women. The fear of a face cover with a sterile overlay was present in 2.6%, only present in male (Table 2).

Table 1. Characteristics of participants (N=152)

Variables	N	%
Gender		
Male	88	57.9
Female	64	42.1
Age		
<65	20	13.2
>65	132	86.8
Total	152	100.0

Table 2. Differences by participants' gender (N=152)

Variables	Male (N)	%	Female (N)	%	Total (N)	%
First operation	32	36.6	52	81.2	84	55.2
Second operation	32	36.6	36	56.2	68	44.7
Now I feel						
Fear	28	43.7	64	72.7	92	60.5
Nervousness	4	6.2	16	18.1	20	13.1
Anxiety	16	25.0	12	13.6	28	18.4
Insecurity	8	12.5	-	-	8	5.2
Gratitude	8	12.5	4	4.5	12	7.9
I am scared						
Blidness	48	75.0	36	40.9	84	55.3
Pain	12	18.7	40	45.4	52	34.2
Anesthesia	-	-	12	13.6	12	7.9
Face cover with sterile overly	4	6.2	-	-	4	2.6
Leading life feare						
Blidness	24	37.5	44	50.0	68	44.7
Cancer	16	25.0	48	54.5	64	42.1
AIDS	8	12.5	-	-	8	5.2
Loss of memory	8	12.5	12	13.6	20	13.1
Brain stroke	8	12.5	-	-	8	5.2
Heart attack	-	-	-	-	-	-

The leading life fear in male was blindness (37.5%), then cancer (25.0%). In female the leading life fear was cancer (54.0%), then blindness (50.0%) (Table 2).

The presence of fear in those patients who underwent their first eye surgery (57.1%) in comparison to patients with the second eye surgery (52.9%) was not statistically significant ($p < 0.05$).

DISCUSSION

This is one of first studies to examine fear during cataract surgery and to compare it with fear in other life-threatening diseases like cancer, brain stroke, heart attack, AIDS and memory loss.

Numerous studies have examined the emotional impact exerted by acquired blindness. The most common was depression (Adams & Pearlman 1970, Appollonio et al. 1996, Pager et al. 2004), psychosis (Fitzgerald 1970, Fitzgerald et al. 1987), and anxiety (Foggitt 2001, Nijkamp et al. 2004, Öhman 2000). A similar fear of blindness (55.1%) and pain (40.8%) was shown by authors from Brasil (Oliveira et al. 2005). Also fear in general was the predominant emotion related to undergoing cataract surgery (Marback et al. 2007). The leading life fear in our study was fear of blindness present in 44.7% patients, followed by fear of cancer 42.1%, both were twice as frequent in woman, memory loss 13.1% in both genders equally, and fear of AIDS only in male. Not one patient had the fear of a heart attack in comparison with the presence of other fears asked.

In our study patient were asked which sense were they most afraid of losing, and 44.7% answered blindness, in both genders, but female frequently then male. Memory loss was present in both genders too, but in both genders equally.

Some studies reported patients fears of visual sensations during cataract surgery and better preoperative counseling was suggested for reducing the fear (Ang et al. 2007, Chaudhry et al. 2014, Haripriya et al. 2011, Voon et al. 2005) and establishing a solid doctor-patient relationship (Henderson et al. 2014, Nijkamp et al. 2002, Sharma et al. 2008).

According to our plans, future research will include more participants and qualitative methods which would provide interviews that would describe in more detail the specifics and (in)direct causes of patients fear and direct and indirect factors which can cause patient fears before cataract surgery. A planned study like this would provide more objective and comprehensive results.

CONCLUSION

Fear is the predominant emotion before cataract surgery which is in correlation to the leading life fear - fear of blindness. Good preoperative preparation and a trusting doctor-patient relationship are important for reducing the fear of the procedure.

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Contribution of individual authors:

All authors reviewed and discussed the manuscript draft and contributed to the final manuscript and all authors give final approval of the version to be submitted.

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