

PSYCHOLOGICAL REACTIONS TO CATARACT SURGERY WITH INTRAOCULAR LENS IMPLANTATION

S. CHAUDHURY, P.K. CHAKRABORTY, V.S. GURUNADH, P. RATHA

A prospective study of fifty patients who underwent cataract surgery with intraocular lens (IOL) implantation was undertaken. Factors aggravating and allaying pre-operative, intra-operative and post-operative anxiety were studied. A good doctor-patient relationship, confidence in the ophthalmologist, and knowledge of successful surgery with IOL implantation in an acquaintance were the major anxiety relieving factors. The main anxiety provoking factors were concerns about the success of surgery and the requirement of laying immobile during surgery covered with surgical drapes. Detailed technical knowledge about the surgery was anxiety provoking and the majority of the patients did not desire it.

Key words: psychological reaction, cataract surgery, anxiety.

INTRODUCTION

Ocular surgery produces a lot of anxiety due to the possibility of loss of vision. Currently in India, intracapsular or extracapsular extraction of the cataract is the commonest surgical procedure in vogue. Historically, this type of cataract surgery was occasionally followed by post-operative delirium, especially in earlier times when both the eyes were patched for forty eight hours after surgery to minimize ocular movements. With the advent of sutures binocular bandages are no longer used, which has relieved this and other post-operative psychiatric problems (Weisman & Hackell, 1958). Recent technological advance in cataract surgery has resulted in a shift from inpatient to the outpatient setting and a shift towards implantation of IOL and away from spectacles or contact lens correction which produced unsatisfactory results.

Most of the studies on psychological reactions to cataract surgery were carried out on patients with post-operative aphakia (Hill, 1982; Murphy & Donderi, 1983; Summers & Reich, 1979; Chaudhury et al, 1992). This presents marked differences in visual sensation and perception between the preoperative and the postoperative condition and requires a relearning of visual information processing (Murphy & Donderi, 1983). On the other hand IOL implantation results in practically a return to the pre-morbid state without a period of temporary loss of vision. Obviously an examination of the psychological reactions to cataract surgery with IOL implantation is warranted. The absence of Indian studies in this field prompted us to undertake the present study.

MATERIAL AND METHODS

Fifty consecutive adult patients (thirty one male, nineteen female) who had undergone cataract extraction with IOL implantation at two military hospitals between 1 September 93 and 31 August 94 were included in the study with their consent. Thirty five patients had undergone operation of one eye while fifteen patients had been operated in one eye earlier and were now operated in the second eye. All patients were interviewed at the time of discharge from hospital and again two to four weeks after surgery. The patients were interviewed in an open-ended unstructured fashion with emphasis on the factors which provoked and alleviated their pre-operative, intra-operative and post-operative anxiety. Their understanding of what is involved in cataract surgery with IOL implantation was also explored. Finally, it was ascertained whether detailed information about the operative procedure exacerbated or allayed anxiety. During the second interview enquiry was made about changes in their general level of health, energy, mood and activity post-operatively.

RESULTS

The mean age of the patients who underwent cataract surgery with IOL implantation was 52.9 years (range 25 years to 83 years). Socio-demographic variables of the patients are given in Table 1. The pre-operative visual acuity was more than 6/36 compared with a post-operative visual acuity of less than 6/9. All patients reported anxiety and worry due to surgery. All of them expressed

Table 1
Socio-demographic characteristics of patients (n=50).

Variable	No
Age (in years)	
Below 40	9
41-50	28
61-80	12
Above 80	1
Sex	
Male	31
Female	19
Education	
Below Std. 5	15
6-10 Standard	24
Above Std. 10	11
Marital status	
Married	40
Widowed	9
Unmarried	1
Domicile	
Rural	33
Urban	17
Family income per month	
Below Rs 2000	18
Rs 2001-Rs 3000	19
Rs 3001-Rs 4000	10
Above Rs 4000	3

Table 2
Factors provoking and alleviating anxiety (n=50).

Factors	No	Percent
PROVOKING ANXIETY		
1. Concerns about success of surgery	32	64%
2. Staying immobile during surgery	20	40%
3. Being covered by surgical drapes	15	30%
4. Surgeon talking during procedure	8	16%
5. Fear about breaking the incision	7	14%
6. Effect of coexisting medical illness on surgery	6	12%
7. Knowing someone with poor result from similar surgery	2	4%
ALLEVIATING ANXIETY		
1. Confidence in ophthalmologist	35	70%
2. Knowing someone who had successfully undergone similar surgery	15	30%
3. Previous cataract surgery with IOL implantation	9	18%
4. Ready availability of post operative help	8	16%
5. Previous eye surgery	4	8%
6. Previous surgery of other types	3	6%

satisfaction with the outcome of surgery and most reported that the results surpassed their expectations.

Factors provoking and relieving anxiety due to surgery are given in Table 2. The anxiety provoking factors included: concerns about the surgery being successful or not (64%), staying immobile during the entire procedure (40%), being covered by surgical drapes (30%), fear about breaking the incision (14%), hearing the surgeon talking during the procedure (16%), concerns over coexisting medical illness adversely affecting the surgery (12%), and having a relation or acquaintance with a bad result from a similar surgery (4%). Factors which alleviated anxiety included: a good doctor-patient relationship and confidence in the ophthalmologist (70%), having a relative or acquaintance who had successfully undergone a similar surgery (30%), ready availability of post-operative help (16%), previous cataract surgery with IOL implantation (18%), previous eye surgery (8%), and previous surgery of other types (6%).

Although all the patients had given written informed consent prior to surgery, none of them were able to give even basic information about the surgical procedure or its complications except the possibility of loss of vision. However, only 12% of patients expressed a desire for more information while 42% explicitly said that they did not desire such information as they found such information, especially about complications, to be anxiety provoking. After the operation, 32% patients reported improvement in activities like reading, driving, watching television, 22% reported some brightening of mood, while 14% reported improvement in physical activity.

DISCUSSION

Visual hallucinations, recurrent affective responses to dreaming and waking events, and continuous waking visual experiences have been noted in recently blind adults suggesting a form of "phantom limb phenomena" of the eyes (Fitzgerald, 1970 & 1971). A staged reaction to blindness consisting of disbelief, protest, depression and recovery has also been reported (Huck, 1987). The similarity to the well known stages of death and dying suggest that adjustment to blindness involves a loss or mourning reaction (O'Malley et al, 1989). None of these phenomena were reported by the patients while awaiting cataract surgery despite the very poor visual acuity in some of them.

PSYCHOLOGICAL REACTIONS TO CATARACT SURGERY

This suggests that either the degree of visual impairment associated with cataract is insufficient to precipitate the above reactions or the fact that cataracts are seen essentially as a reversible, non-permanent visual handicap is sufficient to avoid the "blindness reaction".

Only sparse literature exist on the emotional impact of cataract surgery with IOL implantation. Increased pride in personal appearance, increased confidence (Huck, 1987), and some brightening of mood (O'Malley et al, 1989) have been reported after surgery which is in agreement with our findings. Similarly, the effect of cataract surgery on improving physical activity and manual performance has been reported earlier (Applegate, 1987; O'Malley et al, 1989) and our findings support it.

There is a paucity of studies on the factors which allay or aggravate anxiety of cataract surgery with IOL implantation. The major anxiety producing factors were concerns about the success of surgery, the requirement of staying immobile during the procedure under a bright light and being covered with surgical drapes, hearing the surgeon talking during the surgery and fear of breaking the incision. However, the surgical procedure itself, such as the fact that the eye is incised and opened, apparently caused no anxiety. It is possible that the patient reporting more anxiety about aspects peripheral to the surgery (viz. staying immobile and so on) may be an unconscious displacement from the far greater anxiety about the actually more frightening aspects of the surgical procedure itself which was not reported to be associated with anxiety. On the other hand, a good doctor-patient relationship and confidence in the ophthalmologist, together with knowledge of successful surgery in an acquaintance were the major anxiety relieving factors.

The above findings are broadly in agreement with the findings of O'Malley et al (1989). These findings suggest that in peer group interaction with the knowledge of successful surgery in an acquaintance along with confidence in the ophthalmologist, anxiety over the operation is reduced. With this anxiety lessened, those factors which cannot be lessened in peer group discussions but must be directly experienced, such as laying immobile, covered with drapes assume primary importance for the patient.

In view of the above it is to be expected that technical information about the procedure, especially knowledge of side effects are anxiety provoking to most patients. It would appear that the more

ignorant the patient is about the procedure, the less anxious and more comfortable he is. However this is in conflict with the medico-legal requirement of obtaining informed consent before surgery. This aspect obviously requires further detailed study.

CONCLUSION

We conclude from our study that the best anxiety reducing agent for cataract surgery with intraocular lens implantation is a good doctor-patient relationship and confidence in the doctor. Contact with a patient who has successfully undergone similar surgery also reduces the anxiety. In addition, a brief explanation of the actual process of surgery (Eg: you will have to lie still on an operation table under a bright light; you will be covered with surgical drapes; you will not feel any pain but will be conscious, and so on) may help to reduce anxiety. Finally, during cataract surgery care should be taken in what is spoken in the operation theater as the patient is awake and may misinterpret the conversation.

REFERENCES

- Applegate, W.B.** (1987) Impact of cataract surgery on visual and physical function in elderly patient. *Journal of the American Medical Association*, 257, 1864-1066.
- Chaudhury, S., Mahar, R.S. & Augustine, M.** (1992) Post-cataractomy delirium: A two year prospective study. *Indian Journal of Psychiatry*, 34, 154-158.
- Fitzgerald, R.G.** (1970) Reactions to blindness. *Archives of General Psychiatry*, 22, 370-379.
- Fitzgerald, R.G.** (1971) Visual phenomenology in recently blind adults. *American Journal of Psychiatry*, 127, 109-111.
- Hill, B.J.** (1982) Sensory information, behavioral instruction and coping with sensory alteration surgery. *Nursing Research*, 31, 17-21.
- Huck, D.N.** (1987) Seeing better surely makes you feel better. *Ophthalmic Surgery*, 18, 470.
- Murphy, S.B. & Donderi, D.C.** (1983) Predicting activity and satisfaction following cataract surgery. *Journal of Behavioral Medicine*, 6, 313-328.
- O'Malley, T.P., Newmark, T.S., Rothman, M.I. & Strassman, H.D.** (1989) Emotional aspects of cataract surgery. *International Journal of Psychiatry in Medicine*, 19, 25-89.

S. CHAUDHURY ET AL.

Summers, W.K. & Reich, T.P. (1979) Delirium after cataract surgery: Review and two cases. *American Journal of Psychiatry*, 136, 386-391.

Weisman, A. & Hackett, T. (1958) Psychosis after eye surgery. *New England Journal of Medicine*, 258, 1284-1289.

***Suprakash Chaudhury* MD, PhD, Psychiatrist, Military Hospital, Meerut (UP) 250 002; *P.K. Chakraborty* MD, DPM, Professor and Head, Psychiatry Department, Armed Forces Medical College, Pune; *V.S. Gurunadh* MS, DOMS, Ophthalmologist, 151 Base Hospital; *P.Ratha* MS, DOMS, Ophthalmologist, Military Hospital Meerut.**

* Correspondence