Psychiatric Complications after Ocular Surgery

M.	Mihoko	Sekimoto ^a
S.	Seiji	Hayasaka ^a
S.	Sachiko	Noda ^a
M.	Masaaki	Iijima ^b
T.	Tomoichi	Setogawa ^a

^aDepartment of Ophthalmology, Shimane Medical University, Izumo, Japan

^bDepartment of Psychiatry, Shimane Medical University, Izumo, Japan

Key Words

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Abstract

Delirium was demonstrated after cataract surgery in a 64-year-old man (case 1). The patient struck his head against the floor; thereafter an extradural hematoma was found and extracted. Postoperative delirium was also noted in a 58-year-old woman (case 2) and in a 26-year-old woman (case 3) with rhegmatogenous retinal detachment. All 3 patients recovered from their psychiatric complications within 1 month.

Mihoko Sekimoto, MD, Department of Ophthalmology, Shimane Medical University, Izumo, Shimane 693 (Japan)

Introduction

Psychosis in patients postoperatively or in those hospitalized in an intensive care unit have been reported [1-5]. To our knowledge, however, only a few patients with psychosis and visual hallucinations after ocular surgery have been described [6, 7]. We recently treated 3 patients in whom psychosis developed after ocular surgery.

Case Report

Case 1

A 64-year-old man complained of blurred vision in both eyes. The patient's past medical and family histories were unremarkable. On ophthalmic examination, the patient's visual acuity was 0.3 OU. Posterior sub-capsular cataracts were found bilaterally. Both eyes appeared otherwise normal.

On July 1, 1986, the patient underwent extracapsular cataract extraction with posterior chamber intraocular lens implantation in the left eye. The operative course was uneventful. Only the operated eye was occluded. On July 2, the patient was disappointed with the left visual acuity of 0.4 and paced the ward, loudly complaining. A few days after the surgery, the patient reported sleeping badly and episodes of paranoia. The hospital's psychiatrist diagnosed the patient as experiencing delirium and treated him with thioridazine. On July 14, the patient struck his head against the floor. Immediately thereafter he was transferred to the Neurosurgery Clinic. An extradural hematoma was found and was extracted. The patient's postoperative course was uneventful. In late July, the patient's psychiatric condition had improved. Good visual acuity (0.8) in the left eye was obtained.

Case 2

A 58-year-old woman complained of visual field defect in the left eye. The patient's past medical and family histories were unremarkable. On examination, the patient's visual acuity was 1.0 OU. Retinal detachment, with multiple atrophic holes, was found in the

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superotemporal quadrant of the left fundus. On July 11, 1989, cryoretinopexy with segmental episcleral buckling was performed in the left eye. Only the operated eye was occluded. The retina attached temporarily.

In late August, the retina detached again. On August 29, sulfahexafluoride gas was injected intravitreally into the left eye. Thereafter, the patient maintained a prone position for 1 week. On August 31, retinal photo-coagulation was performed. In early September, the patient reported sleeping badly and no ocular problems, but she experienced episodes of paranoia. The patient was diagnosed as having postoperative delirium and was treated with haloperidol, sulpiride and clonazepam. In late September, the patient's psychiatric condition had improved. Good visual acuity (1.0 OU) remained. No retinal detachment was found.

Case 3

A 26-year-old woman complained of decreased vision in her right eye. The patient's brother had been hospitalized for psychopathy. On examination, the patient's visual acuity was 0.1 OD and 1.0 OS. Retinal detachment with multiple retinal tears in the superior periphery and a macular hole were found in the right eye. On April 23, 1991, the patient underwent cryoretinopexy, drainage of subretinal fluid, encircling procedure and intravitreal injection of sulfahexafluoride gas into the right eye. Only the operated eye was occluded. Thereafter, the patient was kept in a prone position for 1 week. The retina attached postoperatively.

In late April, the patient reported that a stranger sneaked up to her in the darkness, that her husband abused her and that her sister reviled her. The patient was diagnosed as having postoperative delirium and was treated with levomepromazine. In late May, the patient's psychiatric condition had improved. The right visual acuity improved to 0.2. No retinal detachment was found.

Discussion

In our 3 patients, psychiatric complications developed after ocular surgery. A diagnosis of brief reactive psychosis or postoperative delirium was made in all 3. The surgery and change of the environment may have been stressful and anxiety inducing. Weissman and Hackett [6] have reported that bilateral occlusion may induce black-patch delirium. In our patients, however, only the operated eye was occluded. In our case 1, disappointment with visual acuity was noted postoperatively. In our cases 2 and 3, a prone position was requisite after intravitreal injection of gas. It is possible that anxiety, disappointment and the prone position may have been partly involved in the precipitation of the psychotic episodes experienced by our patients.

Ophthalmologists must take care not only of the patient's ocular and physical conditions but also of the individual's mental status after ocular surgery.

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