

Original Paper

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## Photic Maculopathy Resulting from the Light of a Video Camera in Patients Taking Triazolam

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### Key Words

Light of video camera

Photic maculopathy

Triazolam

### Abstract

Two patients gazed at the bright light of a video camera. Both patients had been taking triazolam. Decreased visual acuity and macular lesions were found in the affected eyes of the patients. The maculopathy in 1 patient (case 1) was irreversible, but that in case 2 recovered. Photic maculopathy from the light of a video camera may be rare.

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### Introduction

Photic maculopathy resulting from exposure to sunlight, welding arc light and the light of an operating microscope has previously been reported [1-16]. We recently examined patients with photic maculopathy caused by the light of a video camera.

### Case Reports

#### Case 1

A 52-year-old woman was struck accidentally in the left eye by the bright light of a video camera on October 31, 1991. The patient was about 50 cm from the video camera. The patient had been taking triazolam for 5 days because of insomnia. She gazed at the light with the left eye for about 20 s. The right eye was fortunately occluded at the time of the accident. The patient's family history was unremarkable.

On November 1, 1991, the patient visited another ophthalmologist complaining of decreased visual acuity in the left eye. On examination, her visual acuity was 1.0 OD and 0.1 OS. The patient was treated with systemic prednisolone, 30 mg daily, for 5 days.

On December 1, 1991, the patient was referred to our clinic. Her visual acuity was 1.0 OD and 0.1 OS. Both intraocular pressures were 13 mm Hg. The eye positions were orthophoric. The corneas and ante-

rior chambers appeared clear OU. Wheel-like opacities were noted in both lenses. The vitreous appeared clear bilaterally. The right fundus appeared ophthalmoscopically normal. A round, reddish brown lesion of one tenth disc diameter was observed ophthalmoscopically in the central fovea of the left eye (fig. 1). On fluorescein angiography, a hyperfluorescent spot without leakage was seen at the central fovea of the left eye from the early to the late phase (fig. 2). A central scotoma in the left eye was found by testing with the Amsler grid. Color vision tested

with Panel D-15 was normal in both eyes. Normal responses were noted on a bright flash electroretinogram.

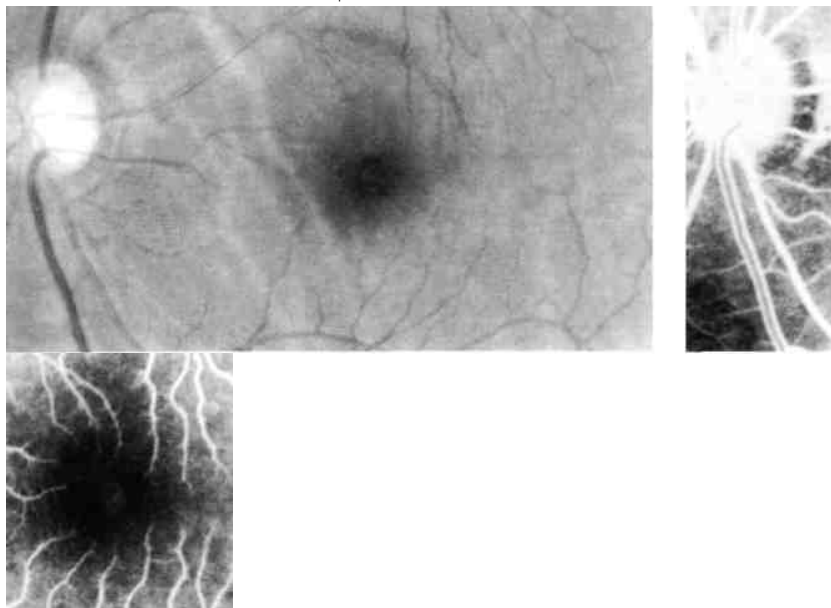
Results of laboratory tests were negative or within the normal range including blood cell counts, blood biochemistry, C-reactive protein, rheumatoid factor, *Treponema pallidum* microhemagglutination test, serum antibody for *Toxoplasma gondii*, angiotensin-converting enzyme level, histoplasmin skin test, chest X-ray and urinalysis.

The patient's visual acuity and fundus appearance remained unchanged during the subsequent 20-month follow-up period.

#### Case 2

A 63-year-old man was struck accidentally in both eyes by the bright light of a video camera on December 12, 1992. The patient was about 1 m from the video camera. The patient had been taking triazolam for 4 days because of insomnia. He gazed at the light for about 10 s. On ophthalmic examination 3 h after the accident, his visual acuity was 0.6 OD and 0.7 OS. Both intraocular pressures were 15 mm Hg. The corneas and anterior chambers appeared clear OU. Cortical opacities were noted in both lenses. The vitreous appeared clear bilaterally.

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Fig. 1. Case 1. A round, reddish brown lesion of one tenth disc diameter is seen in the central fovea of the left eye.

Fig. 2. Case 1. A hyperfluorescent spot without leakage is visible at the central fovea of the left eye by fluorescein angiography.

Round, faintly whitish lesions of one tenth disc diameter were observed ophthalmoscopically in the foveas of both eyes. Relative central scotomas in both eyes were found by testing with the Amsler grid. The patient was treated with oral prednisolone, 30 mg daily, for 4 days.

On February 26, 1993, the patient's visual acuity recovered to 1.0 OU. The foveal lesions disappeared.

#### Discussion

Our described patients had been taking triazolam, gazed at the bright light of a video camera and complained of decreased visual acuity. Photic maculopathy in patients taking fluphenazine or hallucinogenic agents has previously been reported [2, 5]. The effects of these drugs might have reduced the patients' reactive ability to avoid the bright light. Also, triazolam may have dilated the patients' pupils.

Photic maculopathy resulting from exposure to sunlight, welding arc light and the light of an operating microscope

has previously been reported [1-6]. To our knowledge, however, photic maculopathy from the light of a video camera may be rare. The exact powers of the light in our patients were unclear.

In Japan, the video camera is widely used. People should be cautioned to be as careful in risking direct exposure to the camera's light as they would be with any other high-energy source. In particular, patients taking triazolam should be cautioned.

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