Oblique Flashlight Test: Lighting Up Acute Angle-Closure Glaucoma

Kiyoshi Shikino, MD, PhD, Yuta Hirose, MD, and Masatomi Ikusaka, MD, PhD

Department of General Medicine, Chiba University Hospital, Chiba-city, Chiba Prefecture, Japan.

KEY WORDS: acute angle-closure glaucoma; oblique flashlight test.

J Gen Intern Med 31(12):1538

DOI: 10.1007/s11606-016-3737-8

© Society of General Internal Medicine 2016

An 89-year-old woman presented with severe right-sided headache, nausea, and blurry vision at night. Physical examination revealed right eye conjunctival injection and corneal edema. The right eyeball was much harder than the left, and the pupil was mid-dilated (6 mm) and poorly responsive to light. An oblique flashlight test revealed a shadow on the nasal iris (Figs. 1, 2). Slit-lamp examination of the eye revealed corneal edema, a shallow anterior chamber, and intraocular pressure of 58 mmHg. She was diagnosed with acute angle-closure glaucoma. Her symptoms improved after administration of eye drops containing a non-selective muscarinic receptor agonist, IV carbonic anhydrase inhibitor, and IV mannitol. This was followed by laser peripheral iridotomy.

The oblique flashlight test allows rapid estimation of the depth of the anterior chamber of the eye without gonioscopy. A penlight is held next to the temporal side of the eye, with the light beam parallel to the iris, shining across the anterior chamber. If a shadow projects onto the nasal iris, the angle is narrow, because the iris bows forward and blocks the path of the light. The oblique flashlight test has relatively high sensitivity (76.3 %) and specificity (80.7 %) for angle-closure glaucoma.¹

Figure 2 Showing a normal eye without shadowing.

Figure 1 Oblique flashlight test showing a shadow projecting onto the nasal iris (arrow).

Corresponding Author: Kiyoshi Shikino, MD, PhD; Department of General Medicine Chiba University Hospital, 1-8-1, Inohana, Chuo-ku, Chiba-city, Chiba Prefecture, Japan (e-mail: kshikino@gmail.com).

Compliance with Ethical Standards:

Conflict of Interest Statement: The authors declare that they do not have a conflict of interest.

REFERENCES

1. He M, Huang W, Friedman DS, Wu C, Zheng Y, Foster PJ. Slit lamp-simulated oblique flashlight test in the detection of narrow angles in Chinese eyes: the Liwan eye study. Invest Ophthalmol Vis Sci. 2007;48(12):5459-63.

Received March 28, 2016

Revised April 27, 2016

Accepted May 2, 2016

Published online May 12, 2016