

IMAGES IN EMERGENCY MEDICINE

Ophthalmology

Young man with eye pain

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Email: ss_md@hotmail.com**KEYWORDS**

exercise band, home exercise, macular hole, resistance band, traumatic cataract

1 | PATIENT PRESENTATION

A 26-year-old man presented to the ophthalmic emergency department with a sudden decrease in vision after blunt trauma to the right eye while exercising at home using an elastic resistance band (Figure 1). Visual acuity was 2/200 in the right eye and 20/20 in the left eye. Anterior segment examination of the right eye revealed an iris sphincter tear along with a traumatic cataract (Figure 2). Fundoscopic examination showed a dull foveal reflex with a poor view attributed to the cataractous lens. Optical coherence tomography revealed the presence of a full-thickness macular hole (Figure 3).

2 | DIAGNOSIS

The diagnosis was traumatic cataract, iris sphincter tear, and full-thickness macular hole. It was planned to observe the macular hole awaiting a spontaneous closure, and the cataract would be removed on an elective basis. Traumatic macular hole is commonly a result of an acute blunt trauma with high velocity and forceful compression to the globe that usually occurs in the young population. An idiopathic full-thickness macular hole usually requires surgery to achieve closure and improvement in vision.¹ However, a traumatic macular hole may close spontaneously, and a period of observation may be warranted.² Optical coherence tomography is a quick, noninvasive imaging modality that uses low coherence interferometry to produce 2-dimensional,



FIGURE 1 The elastic exercising band that snapped and struck the right eye of the patient after excessive stretching

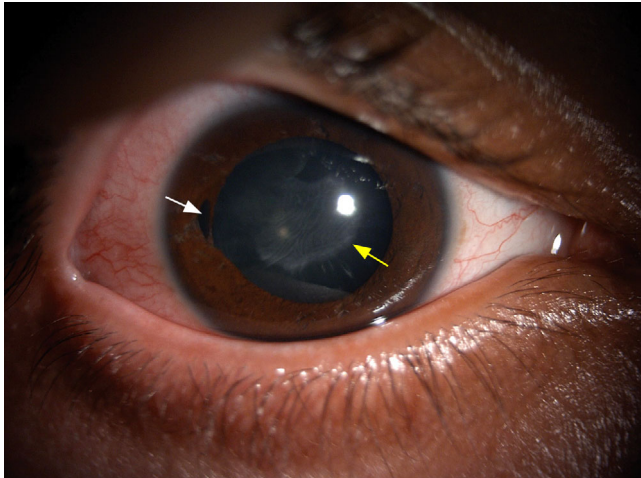


FIGURE 2 Slit lamp examination of the right eye revealing anterior subcapsular opacification (yellow arrow) and iris sphincter tear (white arrow)

cross-sectional images of the retina.³ Home-based exercises are becoming more popular, especially with the curfew orders by higher authorities, and it is imperative to advise taking precautions when using these home-based exercising bands as their unsafe use may lead to unfavorable outcomes.⁴

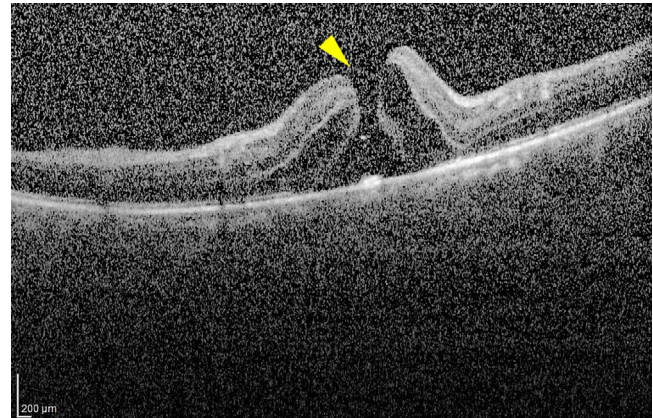


FIGURE 3 Optical coherence tomography of the right eye demonstrating a full-thickness macular hole (yellow arrowhead)

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