A 26-year-old woman presented to the emergency department with a 2-week history of severe migratory headaches, visual disturbance, and intermittent nausea. She had no significant medical history and was not taking any medications regularly.

Her vital signs were normal, but her visual acuity was impaired bilaterally and her visual fields were grossly normal to confrontation. A computed tomography (CT) scan of the head was unremarkable. Bedside focused ocular ultrasound (FOUS) revealed protrusion of the optic papilla into the posterior chamber (Figure 1). Retinal photography also revealed papilledema (Figure 2). The patient began acetazolamide therapy and was urgently referred to a neurosurgical unit for the management of idiopathic intracranial hypertension.

**DISCUSSION**

A CT scan of the head alone is not sufficient in excluding raised intracranial pressure, with inaccurate signs and subjectivity cited as the main limitations (1). FOUS has been used in the diagnosis of ocular conditions, such as retinal detachment, vitreous hemorrhage, lens dislocation, and globe rupture (Figure 3). Measurement of the optic nerve sheath diameter has been shown to correlate with raised intracranial pressure (2).

There exists a clear relationship between optic nerve sheath diameter enlargement and bilateral optic disc protrusion (Figure 1).
bulging in patients with elevated intracranial pressure secondary to idiopathic intracranial hypertension (3). Chronically, raised intracranial pressure has been shown to correlate well with optic papilla protrusion into the posterior aspect of the globe, which is subsequently associated with a severe loss of vision (4).

Diagnosing ophthalmic emergencies via fundoscopic examination alone in order to begin the appropriate initial therapy can be challenging. B-scan FOUS skills are easily acquired, quick to perform, and can enable the emergency physician to expedite diagnosis and disposition in patients with potentially sight-threatening conditions.

**REFERENCES**