Magnetic resonance imaging and magnetic resonance angiography of the brain and orbits with and without gadolinium were normal. Alanine transaminase and aspartate transaminase were elevated. Complete blood count, platelets, ferritin, % saturation, ceruloplasmin, antinuclear antibody, sedimentation rate, rheumatoid factor, RPR, angiotensin-1-converting enzyme, Lyme titers, serum and urine methylmalonate, folate, 24-h urine for heavy metals, and Leber's hereditary optic neuropathy genetic testing were normal. Cerebrospinal fluid protein, glucose, cell count, gram stain, immunoglobulin index, oligoclonal bands, neuromyelitis optica antibody and cytology were all unremarkable. The patient chose to stop treatment after his visual loss, and his visual acuity improved slightly to 20/80 OU with residual inferior field defects.

# Comment

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This report describes bilateral non-arteritic ischemic optic neuropathy (NAION) associated with only PEG interferon alpha 2B and poor functional visual recovery. The prompt onset of visual loss after initiation of therapy, the rare occurrence of simultaneous NAION<sup>2</sup> and the lack of vascular risk factors in this young patient suggests that his NAION was related to PEG interferon alpha 2B. Central nervous system disorders and other autoimmune, vasculitic, nutritional and genetic optic neuropathies that could cause acute bilateral visual loss were ruled out. Another report described a similar presentation in a patient treated with both PEG interferon alpha 2B and ribavarin.<sup>3</sup> At least eight cases of NAION<sup>4</sup> associated with standard interferon have been reported in the literature. Although new pegylated interferons have improved pharmacokinetics and better antiviral efficacy,<sup>5</sup> idiosyncratic ocular toxicity has been associated with variable doses and duration of interferon therapy. Lohmann et al<sup>6</sup> postulated that interferon-alpha can produce autoantibodies that lead to deposition of immune complexes in the posterior ciliary arteries to cause NAION. Interferon-alpha can also stimulate other cytokines to cause an inflammatory reaction in blood vessels leading to ischemia.6

Therefore, physicians treating chronic hepatitis C patients with pegylated interferon should be aware of the potential complication of severe NAION that can occur at any time after the initiation of this drug.

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#### Sir,

# The attitudes and practice of Muslim patients using guttae medication during Ramadan

A questionnaire-based study of 80 Muslim patients revealed that there are different opinions regarding the use of eye drops during Ramadan:

- Drops break the fast, but this does not matter because they are excused from the fast because of illness.
- (2) Drops do not break the fast even if they are tasted and reach the stomach, because eye drops do not provide nutrition and this is not a normal route of ingestion.
- (3) Drops do not break the fast as long as they do not reach the throat.
- (4) Drops break the fast irrespective of illness or whether or not they are tasted and should be omitted.

The large majority of patients in our study fell into category 4.

Compliance and concordance with eye drop medication may be improved by a number of measures. If possible, single dosing may avoid any problems. Making eye drops tasteless may help patients who believe that tasting eye drops prevents them taking their medication. Patients could be advised to instil one drop only; this may prevent a swallowing reflex.

In order to prevent passage of drops to the stomach, temporary punctual plugs could be inserted. Another approach would be to avoid drops and instead use orbital floor, subtenon, intravitreal, or sustained release implants.

This study suggests that patients' compliance and concordance with ocular drug treatment may be reduced during the period of Ramadan. These patients may require education and closer monitoring during this period. It should be noted that only three patients consulted their doctor before changing their drop regime. Mosque imams (priests) can play a major role in advising patients and should be educated on this subject.

Islam forbids fasting if this would be harmful to the individual. A person who deliberately puts his health at risk by fasting against the advice of his physician contradicts this basic principle of Islam. Therefore, appropriate advice from a doctor during Ramadan may encourage patients to continue taking their drops and prevent irreversible damage as a result of ocular disease.

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# Sir, Unusual chorioretinal defects

The case report of a child with atypical chorioretinal colobomata is presented. The defects are unusual as they lie along both the superior and inferior maculopapillar bundles and yet a vision of 6/5 is still present.

Colobomas result from incomplete closure of the embryonic fissure around weeks 5–8 gestation.<sup>1</sup> Closure

starts at the equator and continues anteriorly and posteriorly. Any insult during this time can create defects of varying size and location. Colobomas may extend from the iris margin to the optic disc and involve one or more defects along the fusional lines. Typical colobomas are seen inferonasally.

Atypical colobomas are found outside this area and therefore do not originate in a defect of embryonic fissure closure. They are thought to be either pathogenic in origin or owing to faulty differentiation of ocular structures.<sup>2,3</sup> Macular colobomas have been described as sharply defined, oval, or round central defects.<sup>4</sup> Paramacular colobomas are described as solitary oval- or torpedo-shaped chorioretinal lesions located temporal to the fovea in one or both eyes.<sup>5</sup> Neither accurately describes the colobomas present in this case.

# Case report

A 5-year-old girl presented to us after her first optician's visit. Some areas of retinal pallor (Figure 1) were noted and referred to Eye Clinic. The patient was entirely asymptomatic. There were no developmental concerns raised by the family, she was attending school and doing well. Further questioning revealed a full term pregnancy with no perinatal problems. There was no past medical history and she had never been on any regular medications. There was no family history of note. She had no siblings.

Ocular examination revealed a visual acuity of 6/5 in each eye. No nystagmus was present. Anterior segments, optic discs, and the left fundus were normal. The right fundus had two well-demarcated chorioretinal defects. The edges of the defects gently sloped, demonstrating the thickness of the inner ocular layers down to sclera. The



Figure 1 Right fundus photograph.