rare scattered dot blot hemorrhages throughout the periphery in both eyes.

Fluorescein angiography revealed bilateral blockage corresponding to the areas of hemorrhage, but no associated leakage (Fig. 1B). Optical coherence tomography of the macula demonstrated bilateral subinternal limiting membrane hemorrhage with central thickening (556 μm OD, 479 μm OS), without subretinal hemorrhage (Fig. 1C).

The patient was hospitalized for his systemic symptoms and was found to be pancytopenic with a platelet count of 4000/μL. Bone marrow biopsy demonstrated hypocellularity consistent with aplastic anemia of unknown cause despite extensive diagnostic testing.

The patient was monitored closely, and 3 months after initial presentation, his platelet count was 51 000/μL, the preretinal hemorrhages had resolved, and his vision had improved to 20/40 OD and 20/30 OS.

Aplastic anemia is a rare, idiopathic failure of the bone marrow. Our patient presented with both ophthalmic manifestations as well as systemic symptoms consistent with aplastic anemia. In a retrospective study of patients with aplastic anemia, 23.7% of patients with funduscopic exams had retinal hemorrhages, of which 81% were bilateral.[1] Other retinal findings included central retinal vein occlusion-like picture, optic disc edema, cotton wool spots, and macular edema. Other reports have also described retrobulbar[2] and subhyaloid[3] hemorrhages, and one report characterized a patient with nerve fibre layer, intraretinal, and intragel hemorrhages.[4] Although retinal hemorrhages are relatively common among patients with this uncommon disease, our case is unique due to its presentation prior to the diagnosis of aplastic anemia, highly symmetric appearance, and sparsity of hemorrhages outside of the macula.

Although premacular subhyaloid hemorrhages have been treated with drainage into the vitreous cavity via Nd:YAG laser,[5] this patient was observed closely, and his vision improved markedly due to reabsorption of the hemorrhages and an increase in platelet count during a 3-month period. Our case demonstrates that bilateral preretinal hemorrhages can be a presenting manifestation of aplastic anemia and that an ophthalmic examination can be of vital importance in the prompt diagnosis of this life-threatening disease.

**Disclosure:** The authors have no proprietary or commercial interest in any materials discussed in this article.

**Andrew R. Lee,** [*] **Paramjit K. Bhullar,** [*] **Sharon Fekrat** [*,†]

[*]Department of Ophthalmology, Duke University, Durham, NC; [†]Ophthalmology, Surgical Service, Durham VA Medical Center, Durham, NC.

*Correspondence to:*
Andrew R. Lee, MD, Duke Eye Center, DUMC Box 3802, Durham, NC 27710: andrew.lee@duke.edu

## References

1. Mansour AM, Lee JW, Yahng SA, et al. Ocular manifestations of idiopathic aplastic anemia: retrospective study and literature review. *Clin Ophthalmol*. 2014;8:777-87.
2. Grové JD, Meyer D. Aplastic anemia presenting as spontaneous orbital hemorrhage. *Orbit*. 2008;27:391-3.
3. Ghosh S, Biswas PN, Mukhopadhyay S, et al. Posthepatitis aplastic anaemia presenting only with bilateral vision loss. *J Indian Med Assoc*. 2007;105:524,26,43.
4. Wechsler DZ, Tay TS, McKay DL. Life-threatening haematological disorders presenting with ophthalmic manifestations. *Clin Exp Ophthalmol*. 2004;32:547-50.
5. Ranganath A, Mariatos G, Thakur S. Bilateral macular haemorrhages secondary to hepatitis-associated aplastic anaemia, treated with Nd: YAG laser posterior hyaloidotomy. *BMJ Case Rep* 2011 Dec 1. http://dx.doi.org/10.1136/bcr.08.2011.4715.

*Can J Ophthalmol* 2016;51:e159–e160
0008-4182/16/$-see front matter 
http://dx.doi.org/10.1016/j.jcjo.2016.05.016

## A Christmas tree cataract

An 82-year-old female patient was referred for surgical repair of a full-thickness retinal macular hole associated with profound vision loss in the right eye. She was otherwise healthy and had no history or family history of muscle weakness. Slit-lamp examination revealed needle-like polychromatic crystals within the deep cortex of the crystalline lens (Fig. 1A). With retroillumination, in which the angle of light is perpendicular to the cataract, only an outline of the crystals is seen (Fig. 1B). At other angles of incident light, these refractile lenticular inclusions demonstrated a variety of colours, including pink, green, blue, red, and gold, reminiscent of Christmas tree tinsel (Fig. 1C, D). Known as a "Christmas tree cataract," this form of media opacity is most commonly related to age-related degeneration of crystallin proteins associated with elevated calcium levels in the lens, as in our patient. In a subset of patients, Christmas tree cataracts have an important systemic association: autosomal-dominant myotonic dystrophy. Although these cataracts are often not visually significant, they can progress and impair vision. In this case, vision loss was secondary to the macular hole, but the patient deferred vitreoretinal surgery.

**Acknowledgements:** R.C.R. was supported by NIH/NEI K12EY022299. This sponsor had no role in the design or conduct of the study; collection, management, analysis, or interpretation of the data; or preparation, review, or approval of the manuscript.

# A Christmas Tree Cataract

R.C. Rao and N. Choudhry

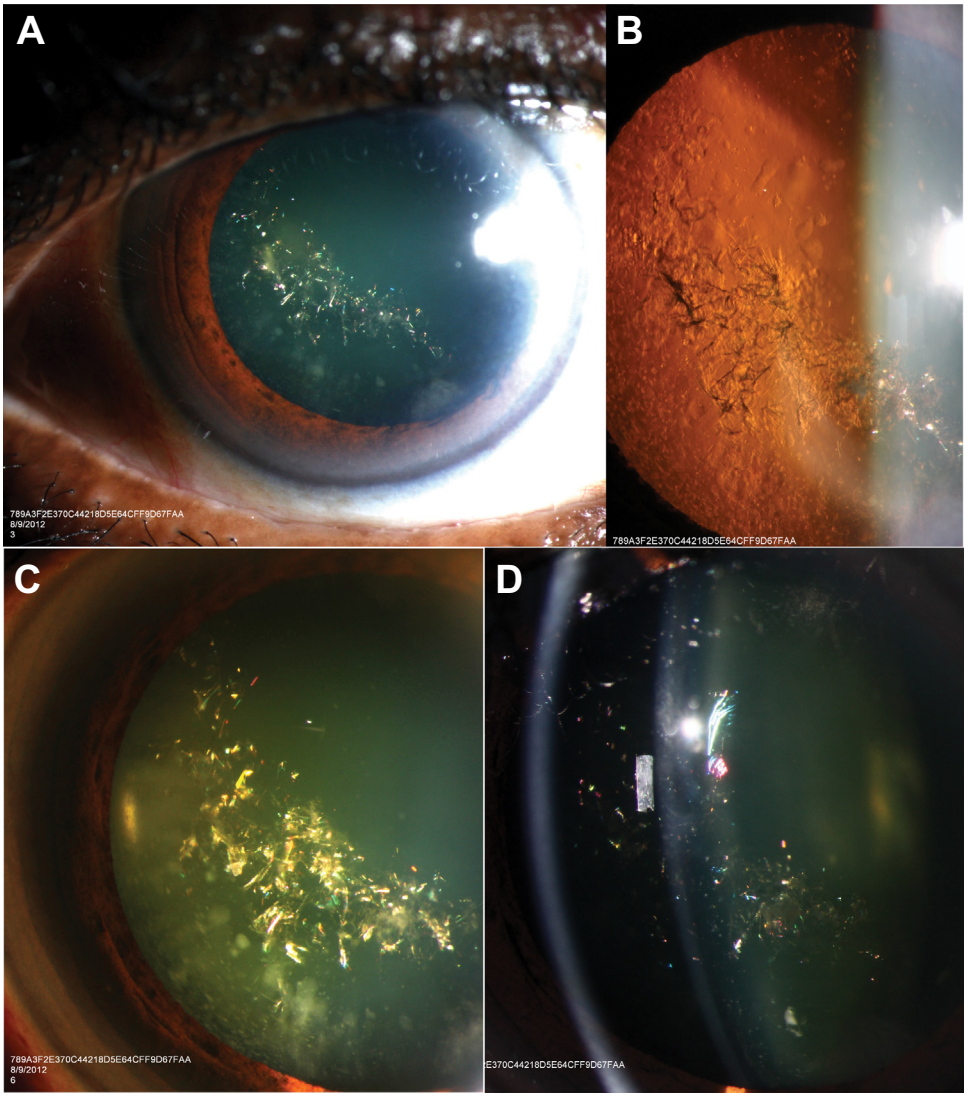


**Fig. 1—Slit-lamp examination (A, C, D) and retroillumination (B) of a Christmas tree cataract showing polychromatic crystals of pink, green, blue, red, and gold within the substance of the crystalline lens.**

**Rajesh C. Rao,[*] Netan Choudhry[†]**
[*]University of Michigan, Ann Arbor, Mich; [†]University of Toronto, Department of Ophthalmology & Visual Sciences, Director of Vitreoretinal Surgery, Herzig Eye Institute, Toronto, Ont.
*Correspondence to:*
Rajesh C. Rao, MD: rajeshr@umich.edu

*Can J Ophthalmol* 2016;51:e160–e161
0008-4182/16/$-see front matter 
http://dx.doi.org/10.1016/j.jcjo.2016.03.005

## In-the-bag intraocular lens exchange 13 years after refractive lens extraction

Most postoperative refractive surprises requiring subsequent intraocular lens (IOL) exchange occur in patients who have had previous myopic LASIK correction[1] or those who have axial lengths less than 22.00 mm or greater than 25.00 mm.[2]

Patients requiring IOL exchange for refractive surprise typically have short intervals between surgeries, ranging between 1 day to 36 months,[3] with 84 months being the longest reported interval after which the second lens was