

Leukemic pseudohypopyon

Category(ies): Uveitis, Retina/Vitreous

Contributor: [Lauren E. Hock, MD](#); [James C. Folk, MD](#)

Photographer: Sarah L. Skiles, CRA

Pseudohypopyon is a relatively rare manifestation of leukemia. It occurs most often in patients with acute lymphoblastic leukemia and may be seen during a blast crisis or as a sign of relapse [1]. Rapid development of an atypical, blood-stained hypopyon that fails to respond to corticosteroid therapy is classic for leukemic pseudohypopyon [2]. Pseudohypopyon is distinguished from infectious or inflammatory hypopyon by the absence of an associated fibrin reaction. This pseudohypopyon was the first sign of this 56-year-old patient's acute lymphoblastic leukemia relapse. Timely anterior chamber aspiration with cytology and systemic malignancy work-up are paramount to ensuring appropriate diagnosis and treatment.

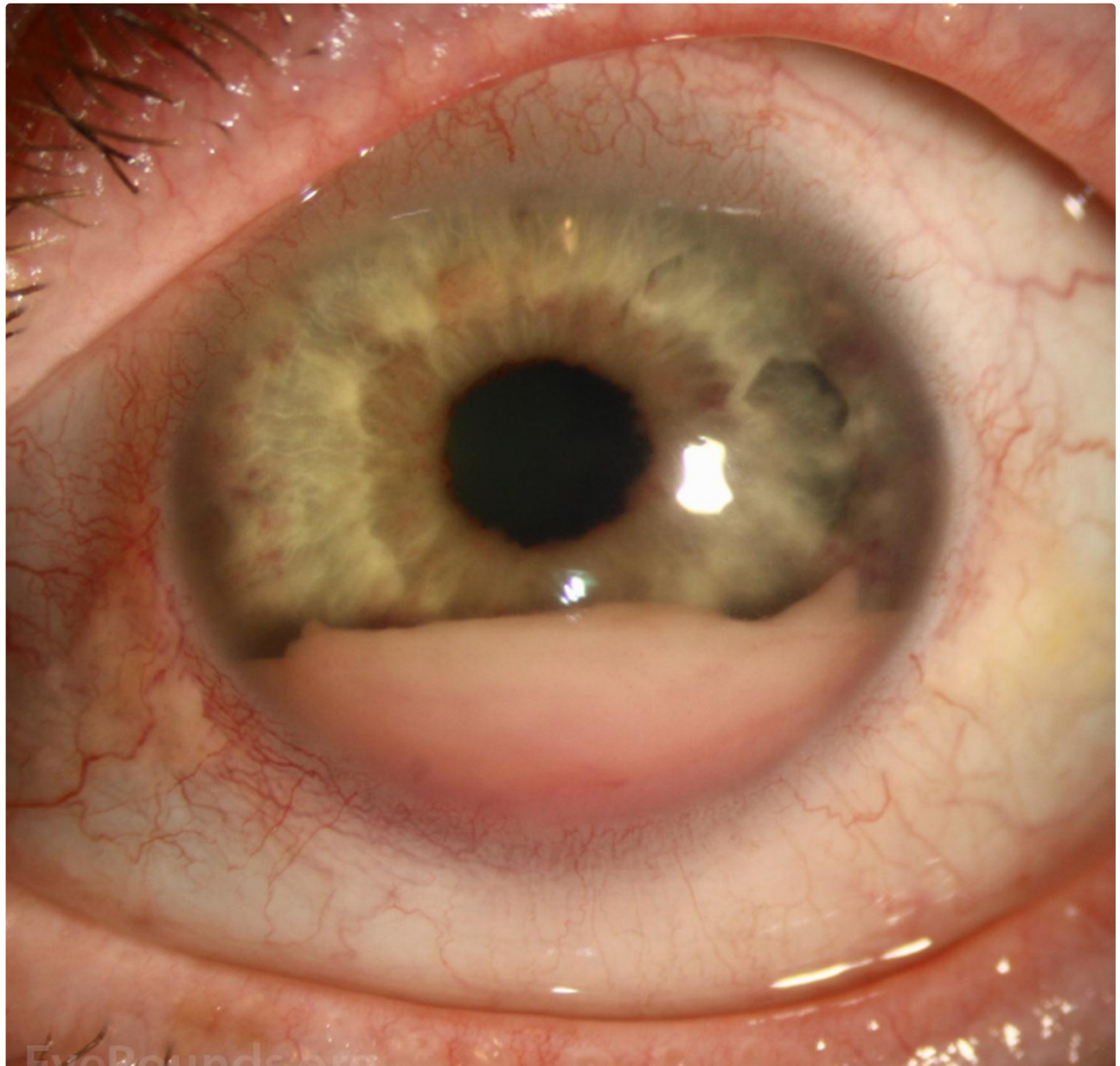




Figure 1. Slit lamp photograph of the left eye shows mild injection, clear cornea, and presence of a 3.5 mm blood-tinged pseudohypopyon in the anterior chamber with 4+ fine cell and no fibrin. Leukemic pseudohypopyon may present bilaterally, but this patient's right eye was unaffected.

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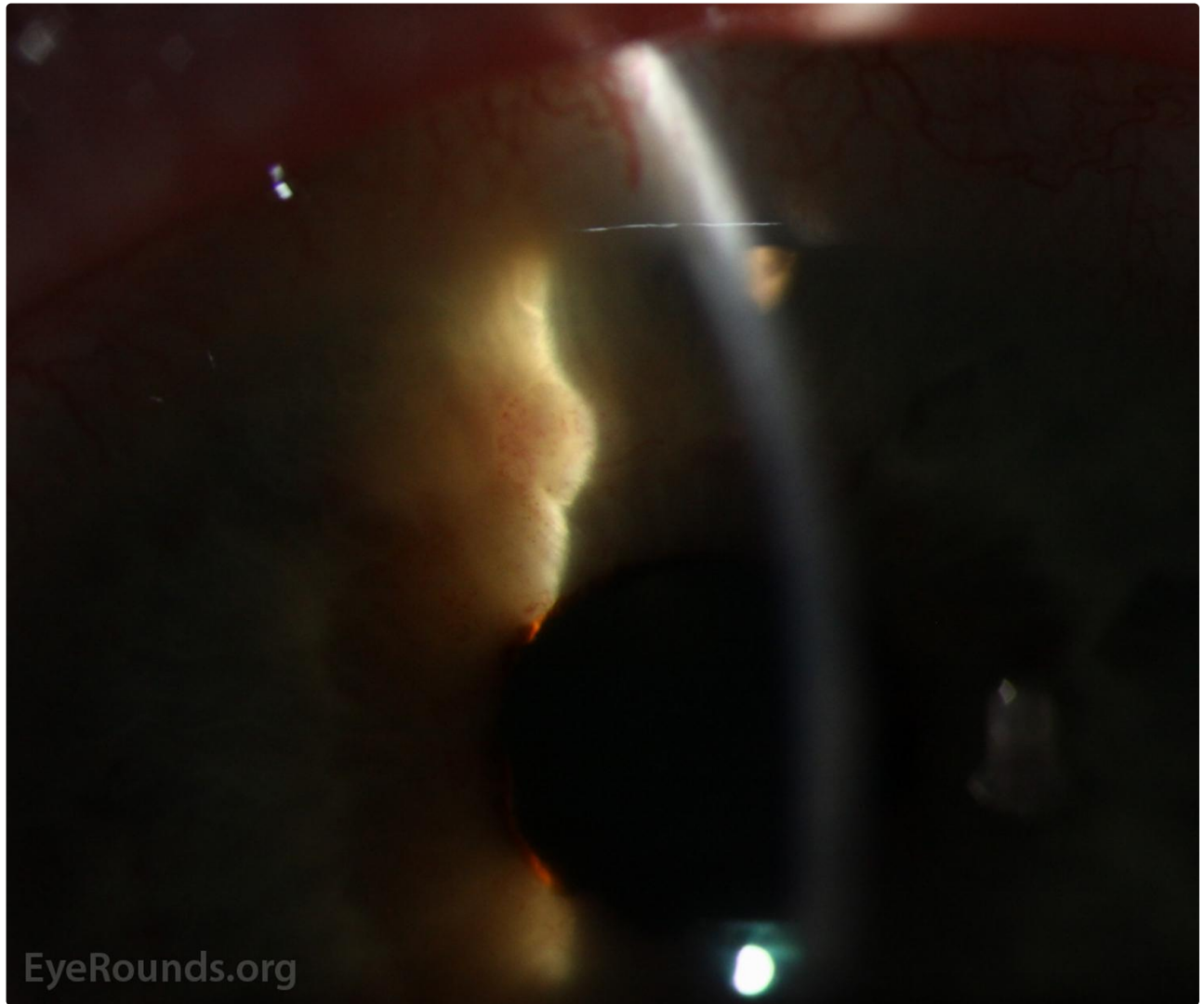


Figure 2. Slit lamp photograph of the iris of the left eye highlights the presence of gelatinous fibrovascular lesions along the pupillary margin and peripheral iris.

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Reference:

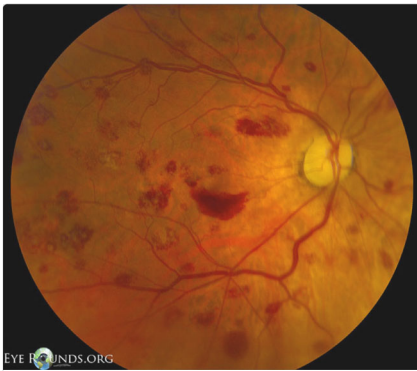
- Yi, D.H., et al., Acute unilateral leukemic hypopyon in an adult with relapsing acute lymphoblastic leukemia. *Am J Ophthalmol*, 2005. 139(4): p. 719-21.
- Ramsay, A. and S. Lightman, Hypopyon uveitis. *Surv Ophthalmol*, 2001. 46(1): p. 1-18.

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Roy J. and Lucille A. Carver College
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Department of Ophthalmology and
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200 Hawkins Drive
Iowa City, IA 52242

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