Ophthalmologic manifestations of acute leukemia are heterogeneous and detectable at initial presentation or relapse, according to a study published online July 10 in the *Annals of Hematology*.
Dina N. Laimon, M.D., from Mansoura University in Egypt, and colleagues examined the incidence of different ophthalmological manifestations in newly diagnosed acute leukemia in a cross-sectional study involving 222 newly diagnosed acute myeloid and acute lymphoblastic leukemia patients (144 and 78, respectively) who presented between January 2022 and February 2023. All patients underwent a complete ophthalmic evaluation.

The researchers found that ophthalmic manifestations were detected in 43.2% of patients. Of these, 1.8% had poor visual acuity. The most common ocular manifestations were retinal hemorrhage and Roth spots (19.8 and 17.1%, respectively). Other ophthalmological manifestations included orbital involvement, ocular motility issues, subconjunctival hemorrhage, conjunctival chemosis, and lid swelling (3.2, 1.4, 5.9, 0.9, and 4.1%, respectively).

Compared with acute lymphoblastic leukemia patients, acute myeloid leukemia patients had a significantly higher frequency of ocular affection, retinal hemorrhages, and Roth spots. A significant association was seen for retinal hemorrhage with anemia.

"Cooperation between ophthalmologists and hemato-oncologists is crucial for recognizing ocular involvement and disease management," the authors write. "We need further evaluation of a larger cohort of acute leukemia patients especially for survival analysis to set the record for the prognostic value of ocular manifestations in such neoplasms."
