

Roth's Spots

Eytan Z. Blumenthal, MD; Ehud Zamir, MD

Roth's spots (named for Moritz Roth, Swiss physician, 1849–1914) are traditionally considered a manifestation of subacute bacterial endocarditis. However, the differential diagnosis of retinal hemorrhages with a central white spot, also referred to as a hemorrhagic cotton-wool spot, includes such entities as anemia, leukemia, retinal phlebitis, *Candida albicans* infection, vascular diseases, collagen diseases, bacterial sepsis,

viral pneumonia, and kala azar, just to name a few, as shown in the figures.¹

Which is the subacute endocarditis-related “true” Roth spot?

Reference

1. Roy FH. *Ocular Differential Diagnosis*. 5th ed. Philadelphia, Pa: Lea & Febiger; 1993:548–549.

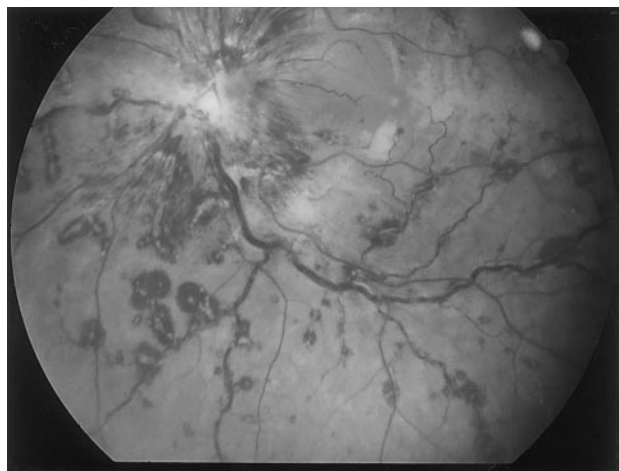


Figure 1. Behcet's disease with multiple systemic thrombotic manifestations (notice disk involvement).

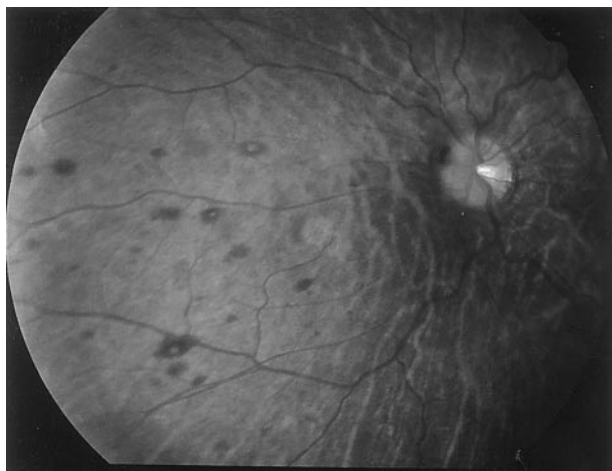


Figure 3. Acute myeloblastic leukemia.

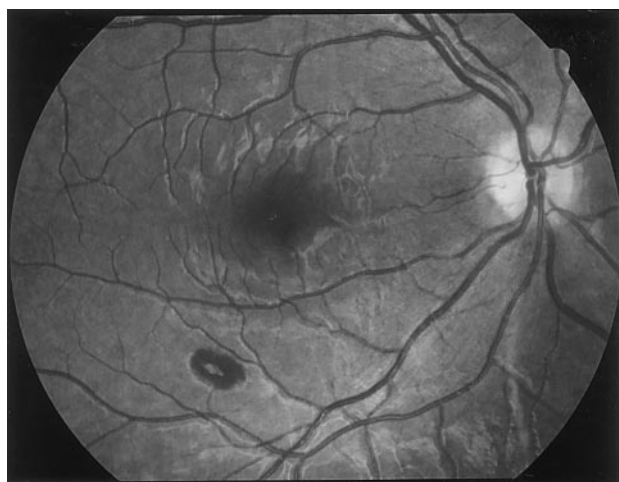


Figure 2. Idiopathic aplastic anemia (white blood cell count, 200; hemoglobin, 5.9; platelet count, 6000).



Figure 4. A 40-year-old woman with rheumatic heart disease and *Streptococcus viridans* endocarditis. Three lesions demonstrate, from left to right, evolution of a Roth spot.

From the Department of Ophthalmology, Hadassah University Hospital, Jerusalem 91120 Israel.

Correspondence to Eytan Z. Blumenthal, MD, Glaucoma Unit, Shiley Eye Center, UCSD, 0946, 9500 Gilman Dr, La Jolla, CA 92093-0946.

The editor of Images in Cardiovascular Medicine is Hugh A. McAllister, Jr, MD, Chief, Department of Pathology, St Luke's Episcopal Hospital and Texas Heart Institute, and Clinical Professor of Pathology, University of Texas Medical School and Baylor College of Medicine.

Circulation encourages readers to submit cardiovascular images to Dr Hugh A. McAllister, Jr, St Luke's Episcopal Hospital and Texas Heart Institute, 6720 Bertner Ave, MC1-267, Houston, TX 77030.

(*Circulation*. 1999;99:1271.)

© 1999 American Heart Association, Inc.

Circulation is available at <http://www.circulationaha.org>