Roth’s Spots

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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

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

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

Figure 3. Acute myeloblastic leukemia.

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.