

## Roth Spots in Native Valve Endocarditis

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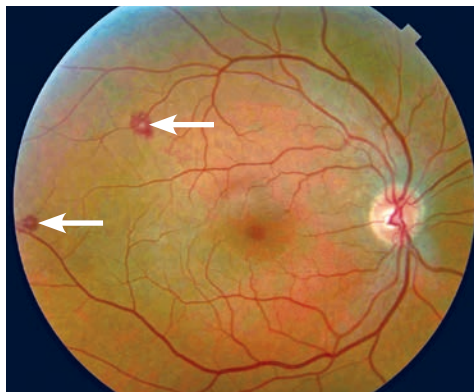
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A 48-year-old man presented with a 3-day history of a gray spot within the central vision of his right eye and of retinal hemorrhages. Mitral valve prolapse was reported, and review of systems revealed a 35-pound weight loss, nonproductive cough, and recurrent fevers during the 3 months prior to evaluation. Physical examination revealed corrected visual acuity of 20/20 OU, an auscultated diastolic heart murmur, and an Osler node on the plantar surface of the left foot. Dilated fundus examination findings (pictured) uncovered 2 white-centered retinal hemorrhages (white arrows) along the peripheral superior and inferior arcades of the right eye consistent with the

diagnosis of Roth spots. Blood culture was positive for *Streptococcus anginosus*, and a transthoracic echocardiogram revealed vegetation with perforation on the posterior leaflet of the mitral valve that was consistent with native valve endocarditis. The patient made full recovery after 4 weeks of systemic treatment with intravenous ceftriaxone (2 g daily) and bioprosthetic mitral valve replacement.

Roth spots are a nonspecific retinal finding and may be found in a variety of other diseases and conditions (eg, diabetes mellitus, anemia, anoxia, leukemia); therefore, a careful systemic evaluation by the physician must be initiated to discover the primary source.<sup>1,2</sup> (doi:10.7556/jaoa.2013.063)



### References

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2. Ramaswamy A, Tarabishy A, Gugliotti D, Harte B. Roth spots—more than meets the eye. *J Hosp Med.* 2011;6(6):369. doi:10.1002/jhm.782.

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