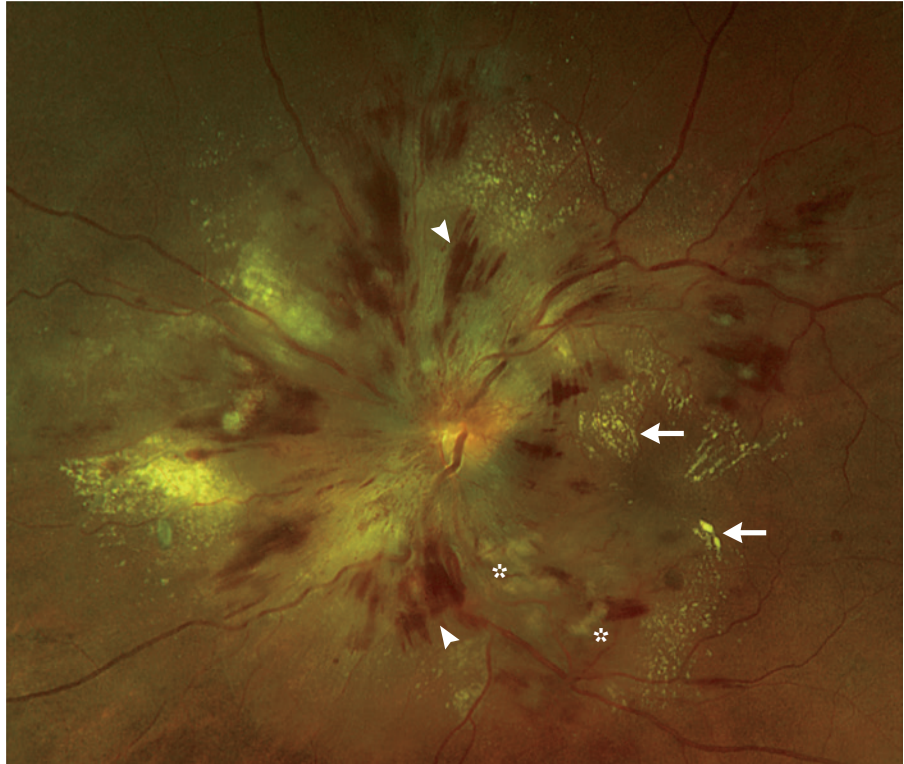


## IMAGES IN CLINICAL MEDICINE

Stephanie V. Sherman, M.D., *Editor*

## Retinopathy in Malignant Hypertension



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**A** 55-YEAR-OLD MAN PRESENTED TO THE EMERGENCY DEPARTMENT WITH a 1-week history of blurred vision in both eyes and headache. He had no chest pain, shortness of breath, or confusion. His blood pressure was 250/170 mm Hg. On ophthalmologic examination, the corrected visual acuity was 20/120 in the right eye and 20/80 in the left eye. Fundusoscopic examination revealed grade 4 hypertensive retinopathy, with disk edema in both eyes, flame-shaped hemorrhages (arrowheads), hard exudates (arrows), and cotton-wool spots (asterisks). Optical coherence tomography revealed foveal neurosensory detachment — a type of localized exudative retinal detachment — in both eyes, which explained the patient's blurred vision. Laboratory studies revealed a blood urea nitrogen level of 41 mg per deciliter (15 mmol per liter; reference range, 8 to 26 mg per deciliter [3 to 9 mmol per liter]) and a creatinine level of 4.4 mg per deciliter (389  $\mu$ mol per liter; reference range, 0.7 to 1.4 mg per deciliter [62 to 124  $\mu$ mol per liter]), and urinalysis revealed hematuria and proteinuria. The patient was admitted to the hospital for management of malignant hypertension. While he was receiving medication for hypertension, his blood pressure improved; 5 months later, his visual acuity had improved to 20/30 in both eyes, and he had resolution of the foveal neurosensory detachments.

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