Retinal detachment with subretinal and vitreous hemorrhages causing secondary angle closure glaucoma diagnosed with ultrasound

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A 90-year-old female with a past medical history of trigeminal neuralgia and age-related macular degeneration (AMD) presented with a four-day history of a left-sided headache, nausea, and vomiting. Regarding her left eye, she reported intermittent flashes of light over the past month and complete vision loss for four days. She denied a history of diabetes, hypertension, anticoagulant use, or ocular trauma. Her ocular history included the use of reading glasses and bilateral cataract surgery forty-five years ago.

She was unable to describe the vision in her left eye prior to symptom onset, stating that “it has been blurry for a while”. She was uncomfortable. Her left eye was diffusely injected with a cloudy cornea and a fixed, mid-dilated, and non-reactive pupil. The vision in her unaffected right eye was 20/200 with an intraocular pressure (IOP) 16 mmHg; her left eye had no light perception (NLP) with an IOP of 56 mmHg.

She was immediately started on an IOP-lowering regimen of dorzolamide, brimonidine, and latanoprost; ophthalmology was consulted service, is inexpensive, and has repeatedly shown no increased risk of radiation to the patient [8]. In a systematic review and meta-analysis by Gottlieb et al., ultrasound was found to be 94% sensitive and 96% specific for the diagnosis of retinal detachment; moreover, subgroup analysis found no statistical significantly differences when comparing scans from emergency department (ED) providers to non-ED providers [2]. Additionally, while CT and MRI can aid in the diagnosis, early surgical repair (laser/open iridotomy or sclerotomy with evacuation) or enucleation for pain control serve as further, more definitive measures.
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Appendix A. Supplementary data

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References


