A 33-year-old male presented with unilateral intermittent floaters and blurring of vision in the left eye for many years. Past medical history was unremarkable. There was no family history of ocular or neurological disorders. Uncorrected visual acuity was 20/20 in both eyes. Slit lamp findings and tonometry results were unremarkable in both eyes. Funduscopic examination of the right eye was normal. In funduscopy of the left eye, contiguous clusters of red and dilated saccules with gray-white surface gliosis were seen in the superior nasal quadrant. In addition, an overlying clotted vitreous hemorrhage and multiple adjacent smaller saccular aneurysmal venous dilations were visible [Figure 1]. Fluorescein angiography showed a large blocking area caused by the clot. Multiple saccular-shaped hyperfluorescences with plasma–erythrocyte level formation corresponding to dilated venules were visible around the clot. There was no leakage [Figure 2]. These findings were compatible with the diagnosis of retinal cavernous hemangioma.

DISCUSSION

Retinal cavernous hemangioma is a rare and benign tumor which is characterized by the formation of grapelike clusters of thin-walled saccular angiomasous lesions in the inner retina or on the optic nerve head. Although most cases of cavernous hemangioma are sporadic, they may occur in a familial (autosomal dominant) pattern and may be associated with intracranial and skin hemangiomas. This tumor may be partially obscured by an epiretinal membrane.
The blood flow in these hamartomatous lesions is derived from the retinal circulation and plasma-erythrocyte layering occurs as a result of the sluggish blood flow. Fluorescein leakage is characteristically absent which is helpful to differentiate the condition from retinal telangiectasia, von Hippel retinal angiomatosis, and racemose aneurysm of the retina. Messmer et al[3] reported a case of cavernous hemangioma as a peripheral dilated shunt vessel connecting the superior and inferior temporal vascular arcades. Some authors reported unilateral retinal cavernous hemangiomas extending circumferentially involving 360° of the mid-peripheral retina.[4] A self-limiting vitreous hemorrhage has been reported in few reports.[1] Shields et al[5] reported a newborn who had hyphema and vitreous hemorrhage in her left eye immediately after birth. The fundus lesion did not enlarge during a 52-year course follow up, but numerous episodes of hyphema and vitreous hemorrhage led to chronic glaucoma and eventual visual loss. Our patient presented with only a large clot overlying a vascular lesion without any other complications.

The tumor appears to be non-progressive in long term with a documented growth described in only 1 of the 61 reported cases.[3] The majority of cavernous hemangiomas of the retina remain stable over time, most can be followed with periodic examinations. Some tumors may undergo spontaneous thrombosis and subsequently develop increased surface gliosis.[6] No curative treatment modality has been determined for these tumors; however, laser therapy has been reported in a few cases.[1] Japiassu et al reported regression of macular cavernous hemangioma with systemic infliximab. They found improvement of visual acuity with a prominent involution of the tumor two weeks after the second infusion of infliximab.[7] Conversely, Alsulaiman et al[8] reported no evident change in the size of the retinal cavernous hemangioma after 4 cycles of intravenous infliximab over a period of 3 months.

In our patient, the vascular lesion did not involve the macula, and no accompanying significant complications were noted; therefore, we preferred to regularly follow the patient.

In summary, we present a case of previously undiagnosed retinal cavernous hemangioma with multiple episodes of mild vitreous hemorrhage presenting as a large clot overlying a vascular lesion. Retinal cavernous hemangioma should be included in the differential diagnosis of recurrent vitreous hemorrhage.

Financial Support and Sponsorship
Nil.

Conflicts of Interest
There are no conflicts of interest.

REFERENCES
1. Gass JD. Cavernous hemangioma of the retina. A neuro-oculo-cutaneous syndrome. Am J Ophthalmol 1971;71:799-814.
2. Verlaan DJ, Davenport WJ, Stefan H, Sure U, Siegel AM, Rouleau GA. Cerebral cavernous malformations: Mutations in Krit1. Neurology 2002;58:853-857.
3. Messmer E, Laqua H, Wessing A, Spitznas M, Weidle E, Ruprecht K, et al. Nine cases of cavernous hemangioma of the retina. Am J Ophthalmol 1983;95:383-390.
4. Hewick S, Lois N, Olson JA. Circumpirferential peripheral retinal cavernous hemangioma. Arch Ophthalmol 2004;122:1557-1560.
5. Shields JA, Eagle RC Jr., Ewing MQ, Lally SE, Shields CL.
Retinal cavernous hemangioma: Fifty-two years of clinical follow-up with clinicopathologic correlation. *Retina* 2014;34:1253-1257.

6. Turell ME, Singh AD. Vascular tumors of the retina and choroid: Diagnosis and treatment. *Middle East Afr J Ophthalmol* 2010;17:191-200.

7. Japiassú RM, Moura Brasil OF, de Souza EC. Regression of macular cavernous hemangioma with systemic infliximab. *Ophthalmic Surg Lasers Imaging* 2010;Mar 9:1-3.

8. Alsulaiman SM, Abouammoh MA, Al-Dahmash SA, Abu El-Asrar AM. Is systemic infliximab therapy effective for retinal cavernous hemangioma? *Saudi Med J* 2014;35:1127-1130.