



Valsalva Retinopathy- 3 Case Reports

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I. INTRODUCTION:

- Valsalva retinopathy occurs with increased intrathoracic or intra-abdominal pressure which is transmitted to the eye resulting in intraocular bleeding. The hemorrhage is usually unilateral or bilaterally asymmetrical and located in the macula.
- Sub internal limiting membrane hemorrhage is most common, but subretinal, retinal, and/or intravitreal bleeding may occur as well. The possible causes being coughing, vomiting, sneezing, straining at stool, lifting, and sexual intercourse.

II. MATERIALS AND METHODS:

Case 1 - A 23 years old pregnant female with 31 weeks of gestation presented with history of a sudden decrease in vision in her left eye from seven hours.

Case 2 - A 30 years old patient presented with a sudden onset painless diminution of vision in the

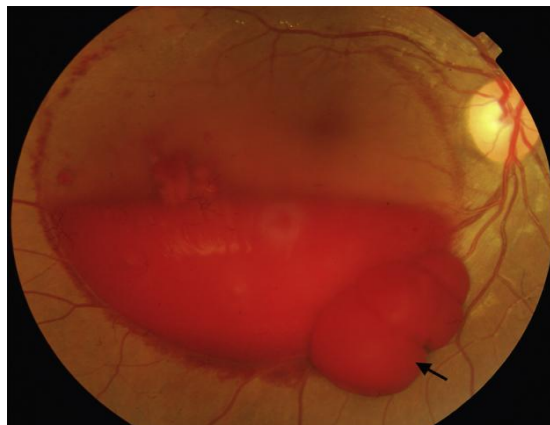
left eye following a bout of vomiting 4 hours before.

Case 3 - A 58-year-man developed an acute decrease in vision to 5/60 in his right eye after blowing the conch while performing "Puja," which is the act of praying to God in Hindu culture.

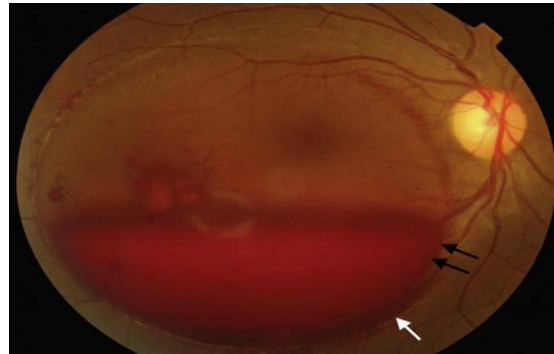
INVESTIGATIONS:

- The intraocular pressure of both eyes : Normal
- Blood pressure : Normal
- Complete blood count, Prothrombin Time, Activated Partial-Thromboplastin Time, and Blood Glucose level : Normal.
- Fundus Fluorescein Angiography : Normal

Ophthalmoscopy : Fundus evaluation revealed sedimented bright red preretinal hemorrhage that was enclosed by a dome-shaped preretinal membrane . The hemorrhage had a classical double-ring sign, the outer and inner ring representing the subhyaloid hemorrhage and subinternal limiting membrane bleed, respectively.



CASE 1



CASE 2



CASE 3

Diagnosis : VALSALVA RETINOPATHY

III. MANAGEMENT:

1. Conservative management – Valsalva retinopathy typically clears without sequel.
2. Nd:YAG laser membranotomy aimed at the lower part of the collection with the Zeiss Visuals YAG III machine using Goldmann's three mirror laser lens.

IV. DISCUSSION:

- Following Valsalva maneuver, Valsalva retinopathy can occur in young healthy adults.
- There is a rapid increase in thoracic venous pressure during a Valsalva maneuver, which can lead to rupture of the superficial retinal capillaries, thus leading to hemorrhagic detachments of the internal limiting membrane.
- The blood is usually localized to the sub-internal limiting membrane (ILM) space and/or the subhyaloid space.
- Valsalva retinopathy usually has a good prognosis and is usually self-resolving.
- In all the three cases there was a sudden blurring and diminution of vision.

- All the investigations including IOP, BP and blood analysis were found to be normal.
- Two of the cases were treated conservatively and one of them was treated with Nd:YAG laser membranotomy aimed at the lower part of the collection with the Zeiss Visuals YAG III machine using Goldmann's three mirror laser lens.

V. CONCLUSION:

Though Valsalva retinopathy is a self-limiting condition it gives a fundoscopic impression of many other vision-threatening conditions like diabetes, hypertension, sickle cell disease, anemia, and idiopathic thrombocytopenic purpura. Hence proper anticipation using clinical acumen is a must to differentiate the condition from other masquerading diseases.

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