



## Spontaneous Resolution of a Valsalva Retinopathy After Labour

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### Abstract

Valsalva retinopathy (VR) is a retinopathy characterized by pre-retinal hemorrhage secondary to raised intrathoracic pressure. It usually heals spontaneously over a period of weeks to months. But in some cases, it requires clinical intervention.

We report the case of a spontaneous resolution of a Valsalva retinopathy in a young pregnant woman after her labour.

**Keywords:** Valsalva Retinopathy; ILM; Hemorrhage; Labour

### Introduction

Valsalva retinopathy is characterized by preretinal hemorrhage caused by a sudden increase in intrathoracic or intraabdominal pressure [1]. It often occurs in healthy young adults as a result of a variety of clinical settings such as intense exercise, defecation effort, vomiting [2].

This case report aims to emphasize the place of pregnancy in this pathology and to reinforce conservatory treatment in priority.

### Case Report

We report the case of a 32-year-old woman with no remarkable personal or familial medical history, complained of an unilateral sudden visual loss of her left eye after vomiting during her seventh month of her pregnancy. She refused to go to the emergency department for examination.

Blood pressure, complete blood count, coagulation profiles and fasting blood glucose were within the normal ranges throughout all her pregnancy.

After giving birth vaginally at 38 weeks of pregnancy without complications, the patient presented to the ophthalmology depart-

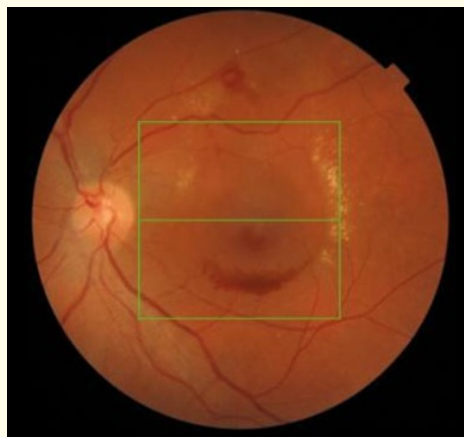
ment. Her visual acuity was 7/10. The patient described her vision loss as painless, non-progressive, non-associated with preceding trauma or any ocular symptoms. The fundus examination showed a two-disk diameter in size resolved sub-internal limiting membrane (ILM) hemorrhage over the macular area. There is a rim of surrounding nerve fiber layer. A small amount of blood remained sedimented. (Figure 1).

OCT cut above the level of the fovea shows two distinct membranes: the blue arrow indicates the patchy low reflectivity of the posterior hyaloid surface; the yellow arrow points at the hyper-reflective ILM (Figure 2).

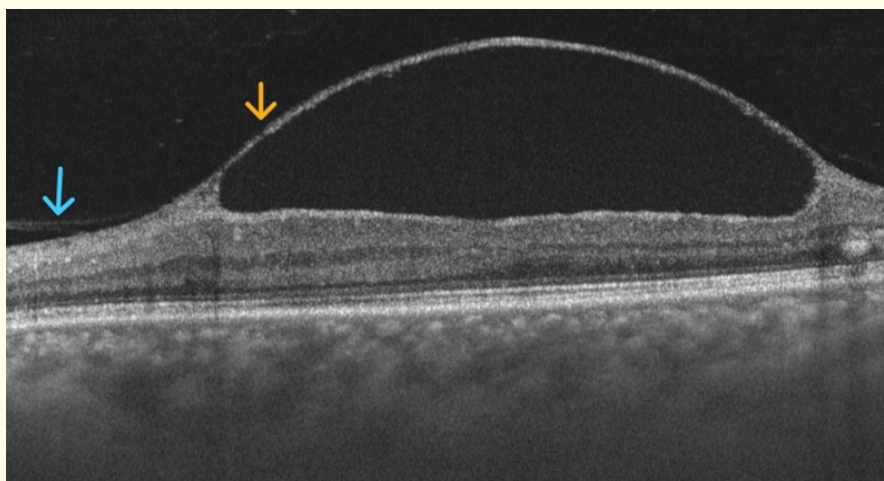
Based on the clinical findings and laboratory studies, the diagnosis of Valsalva retinopathy was confirmed.

Reviewed after, there was a complete anatomical and functional restoration, with a visual acuity of 10/10 in her left eye.

This case report showed a spontaneous resolution of the Valsalva retinopathy without clinical intervention.



**Figure 1:** Fundus photography of the left eye showing a two disk diameter in size resolved sub-internal limiting membrane (ILM) hemorrhage over the macular area. Note the hard exudates on the supero-temporal region of the delimited ring.



**Figure 2:** OCT image of the left eye showing the hyper-reflective ILM. The posterior hyaloid is fused with the ILM over the macular area where the pre-retinal hemorrhage existed.

## Discussion

Premacular hemorrhage may be idiopathic, but it's often linked with various conditions such as vitreomacular traction, proliferative diabetic retinopathy, macroaneurysms, retinal vein occlusions, and blood disorders [3]. Therefore, patients presenting with this condition require comprehensive evaluations to rule out underlying vascular issues.

The primary treatment options for VR include observation, laser hyaloidotomy, laser membranectomy, pneumatic displacement of the hemorrhage through intravitreal injection of gas, sometimes with recombinant tissue plasminogen activator, and pars plana vitrectomy [4].

In our case, the VR resolved spontaneously without clinical intervention with good improvement in visual acuity.

## Conclusion

In short, Valsalva retinopathy classically manifests as preretinal hemorrhage secondary to rupturing of superficial retinal vessels caused by physical exertion. Prognosis usually is good, with spontaneous resolution occurring within months after onset, but depends on location of the hemorrhage and the layer of retina involved.

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