

Valsalva Retinopathy And Pregnancy

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Résumé :

Valsalva retinopathy is an acute pre-retinal hemorrhage that complicates closed glottis strain, which causes a sudden rise in intra-abdominal pressure. Considered benign, it can resolve spontaneously or following YAG laser treatment to disperse blood in the vitreous cavity. We report the case of two young pregnant women who presented to the emergency room with a Valsalva retinopathy treated by laser YAG.

Key words : Hemorrhage, pregnancy, pre-retinal, Valsalva,

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Abstract : Valsalva retinopathy is an acute pre-retinal hemorrhage that complicates closed glottis strain, which causes a sudden rise in intra-abdominal pressure. Considered benign, it can resolve spontaneously or following YAG laser treatment to disperse blood in the vitreous cavity. We report the case of two young pregnant women who presented to the emergency room with a Valsalva retinopathy treated by laser YAG.

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I. INTRODUCTION :

Valsalva retinopathy is an acute pre-retinal hemorrhage complicating closed glottis strain. Pregnancy is known to be a risk factor for this condition because of the high abdominal pressure. It can resolve spontaneously or following YAG laser treatment which causes blood dispersion in the vitreous cavity.

II. CASE REPORT :

A. CASE NUMBER 1 :

A 32 years-old patient, 9 months pregnant, with no particular pathological history, presented to the emergency room for a sudden drop in visual acuity in the left eye following an exertion of sneezing. Examination of the right eye: Visual acuity at 10/10. Anterior and posterior segment without particular abnormalities. Examination of the left eye: Visual acuity limited to the perception of finger movements. Anterior segment: without abnormalities. Posterior segment: presence of a large area of pre-retinal hemorrhage masking the macular area [Figure 1]. The somatic examination was normal.

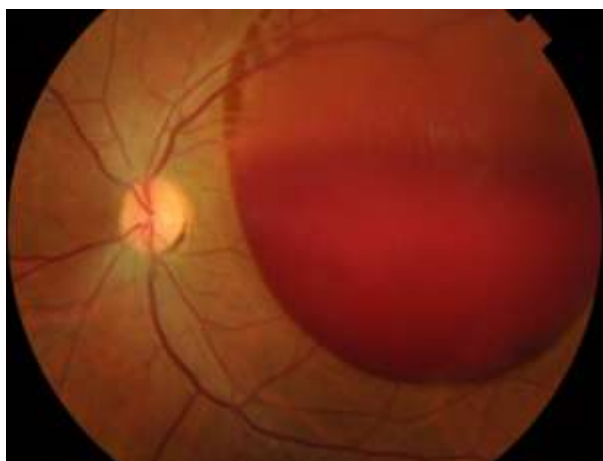


Figure 1 : Pre-retinal hemorrhage masking the the macula

A paraclinical assessment was done: Blood pressure measurement: normal. Complete blood count: normal. The coagulation assessment: normal.

On the basis of these clinical and paraclinical data, the diagnosis of Valsalva retinopathy was confirmed. YAG laser treatment was performed on the lower edge of the hemorrhagic collection. The outcome was very favorable with almost complete absorption of the bleeding three days after treatment with YAG, and visual recovery of 10/10 to 15 days after [Figure 2-3].



Figure 2 : Complete absorption of the pre-retinal hemorrhage (D + 3 of YAG)

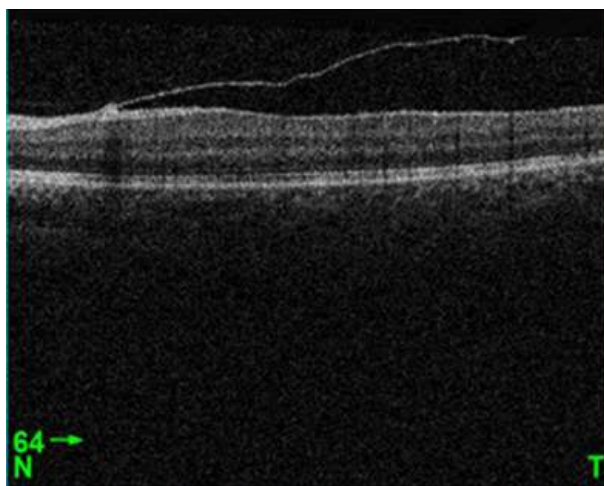


Figure 3 : Optical coherence tomography clearly shows the bulging hyaloid and detached in front of the retina by residual hemorrhage (D + 3 of YAG)

B. CASE NUMBER 2 :

A 28 years-old patient, 8 months pregnant, with no particular pathological history, presented to the emergency room for a sudden drop in visual acuity in the left eye following a vomiting effort. Examination of the right eye: Visual acuity at 10/10. Anterior and posterior segment without particular abnormalities. Examination of the left eye: Visual acuity limited to the perception of finger movements. Anterior segment : without abnormalities. Posterior segment : presence of a large area of pre-retinal hemorrhage masking the macular area [Figure 4]. The somatic examination was normal.



Figure 4 : Pre-retinal hemorrhage located in the macula

A paraclinical assessment was done: Blood pressure measurement: normal. Complete blood count: normal. The coagulation assessment: normal.

On the basis of these clinical and paraclinical data, the diagnosis of Valsalva retinopathy was confirmed. YAG laser treatment was performed on the lower edge of the hemorrhagic collection [figure 5]. The outcome was very favorable with almost complete absorption of the bleeding three days after treatment with YAG, and visual recovery of 10/10 after one month [Figure 6].



Figure 5 : two hours after YAG

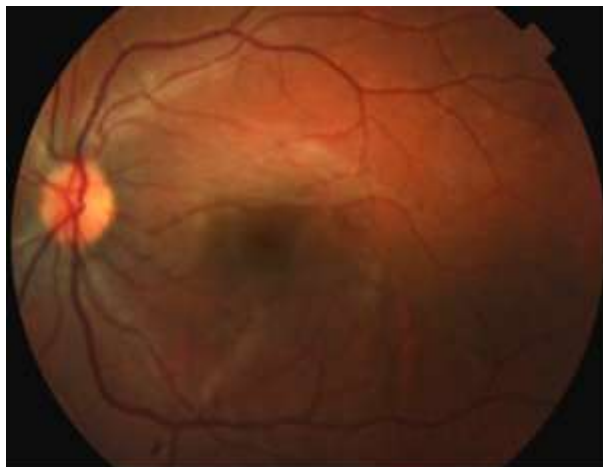


Figure 6 : Complete absorption of macular hemorrhage after one months in Valsalva retinopathy

III. DISCUSSION :

Valsalva retinopathy is a pre-retinal hemorrhage that occurs with increased abdominal pressure transmitted to the eyeballs. Intraocular venous pressure increases, causing the superficial retinal capillaries to rupture [1].

Pregnancy, which is associated with a significant increase in abdominal pressure, is known to be a risk factor for this condition. Other causes of this condition include hemostasis disorders such as thrombocytopenia [2]. The prognosis for these hemorrhages is generally good, with slow spontaneous absorption. The YAG laser treatment disperses the blood in the vitreous cavity and thus accelerates absorption.

Vaginal delivery does not appear to be contraindicated in cases of Valsalva hemorrhage, particularly in view of the non-description of recurrent bleeding, although any cause of possible bleeding during pregnancy and childbirth must be ruled out. [3]

IV. CONCLUSION :

These observations show that pregnancy is a risk factor for Valsalva retinopathy. The diagnosis must be made after eliminating the other causes. The YAG laser appears to be an effective, minimally invasive therapy, especially in pregnant women with better results and fewer complications.

BIBLIOGRAPHY :

[1] S. Nghiem-Bufferl, 2, B. Guiberteau. Rétinopathie de Valsalva et grossesse. Valsalva retinopathy in pregnancy. Centre ophtalmologique d'imagerie et de laser, Paris; 2 service d'ophtalmologie, hôpital Avicenne, Bobigny. Images en Ophtalmologie • Vol. III • n° 3 • juillet-août-septembre 2009

[2] Deane JS, Ziakas N. Valsalva retinopathy in pregnancy. Eye. 1997; 11(1):137-8. doi: 10.1038/eye.1997.33.

[3] El-Defrawy H, Sallam A, McKechnie CJ, et al. Valsalva retinopathy in pregnancy. Should we treat? J R Soc Med Sh Rep 2011;2:1-3. 10.1258/shorts.2011.011035