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A Case Report of Spontaneous Retrohyaloid Hemorrhage That Revealed Immune Thrombocytopenic Purpura

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Abstract Case Report

Retrohyaloidal hemorrhage, is a localized blood collection that typically forms between the internal limiting membrane and the posterior hyaloid. It is a common side effect of several retinal diseases, including retinal artery macroaneurysms and proliferative diabetic retinopathy. It can also, less frequently, result after a Valsalva maneuver. We describe the case of a 28-year-old female patient who presented to the ophthalmological emergency room due to a rapid, painless decrease in visual acuity in her left eye. Upon inspection, the examination revealed a general clinical anemic condition and a retro-hyaloid and intra retinal hemorrhages. Our work's goal is to highlight the semiological significance of a unilateral decline in visual acuity when a hemorrhagic condition is present. Retro-hyaloid hemorrhage should be suspected in cases with hemorrhagic syndrome, which is typically connected to severe anemia. This needs to lead to an urgent etiological evaluation so that an immune thrombocytopenic purpura can be diagnosed.

Keywords: Thrombocytopenic Purpura, Retrohyaloid Hemorrhage, Anemia.

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INTRODUCTION

Retrohyaloidal hemorrhage, is a localized blood collection that typically forms between the internal limiting membrane and the posterior hyaloid.

It is a common side effect of several retinal diseases, including retinal artery macroaneurysms and proliferative diabetic retinopathy. It can also, less frequently, result after a Valsalva maneuver.

We describe the case of a 28-year-old female patient who presented to the ophthalmological emergency room due to a rapid, painless decrease in visual acuity in her left eye. Upon inspection, the examination revealed a general clinical anemic condition and a retro-hyaloid and intra retinal hemorrhages.

Our work's goal is to highlight the semiological significance of a unilateral decline in visual acuity when a hemorrhagic condition is present.

CASE REPORT

This patient is seeking consultation in the emergency room's ophthalmology department for a sudden, painless decline in her left eye visual acuity.

The ophthalmological examination showed a visual acuity counting the fingers at one meter, the examination of the anterior segment was without particularities. On the fundus, we noted the presence of a retro-hyaloid hemorrhage in front of the macula area associated with superior and inferior peripapillary pre retinal hemorrhages as well as punctiform and diffuse intraretinal hemorrhages (figure 1). Examination of the adelphic eye was unremarkable.



Figure 1: fundus of the left eye showing pre-retinal and intra-retinal hemorrhages

A clinical anemic syndrome comprising pallor, headache, tinnitus, and effort dyspnea was also revealed by the general examination.

A vascular retinal etiology was ruled out by retinal fluorescein angiography (figure2).

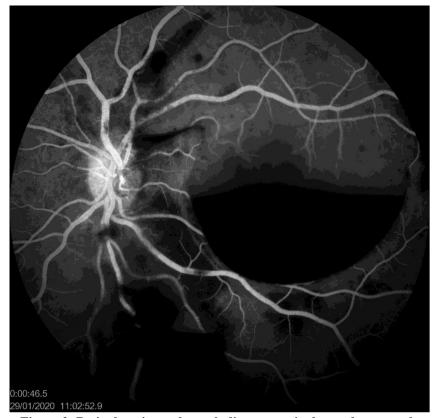


Figure 2: Retinal angiography excluding any retinal vascular anomaly

A hemoglobin level of 5.6 g/dL was found during an emergency biological examination indicating severe hypochromic microcytic anemia combined with a severe case of thrombocytopenia (13,000 platelets/mm3). After that, the patient was sent to hematology, where immune thrombocytopenic purpura was identified. Systemic corticosteroid therapy and a blood transfusion were administered to the patient. The rise in platelet count and the steady improvement of the left eye's visual acuity to 10/10th were favorable developments.

DISCUSSION

It is uncommon for isolated severe thrombocytopenia to result in retinal hemorrhage. The research indicates that severe anemia is frequently linked to it, especially during purpura idiopathic thrombocytopenia [1].

Immunological thrombocytopenic purpura, formerly called idiopathic, corresponds to an autoimmune disease characterized by the presence of anti-platelet autoantibodies leading to thrombocytopenia causing serious hemorrhagic accidents.

Retrohyaloid hemorrhages during immunological thrombocytopenic purpura are rarely serious and do not require any specific treatment [2].

Rare cases presenting vitreoretinal hemorrhage in the context of immunological thrombocytopenic purpura have been described, and can sometimes constitute the sign revealing of the latter, as is the case of our patient [3].

CONCLUSION

Retro-hyaloid hemorrhage should be suspected in cases with syndrome hemorrhagic, which is typically connected to severe anemia. An urgent etiological evaluation is required in order to diagnose immunological thrombocytopenic purpura.

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