

## Spontaneous Expulsive choroidal hemorrhage

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### **Abstract:**

Expulsive suprachoroidal hemorrhage can be set in two types: surgical or spontaneous. Spontaneous expulsive suprachoroidal hemorrhage (SESCH) is a rare entity. Most of the reported cases of SESCH were caused by a combination of corneal pathology and glaucoma.

We are reporting a case of a 75-year-old man, who was admitted to the emergency department of our hospital with a spontaneous expulsive choroidal hemorrhage in his left eye. The patient didn't have any history of ophthalmic disease.

Non-surgical spontaneous expulsive choroidal hemorrhage is a very rare and disastrous clinical event. The predisposing involved factors are: advancing age, vascular illness, glaucoma and severe corneal damage.

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### **I. Introduction :**

Expulsive suprachoroidal hemorrhage is a rare event, usually complicating intraocular surgery, with often devastating results. There are few reports of spontaneous expulsive hemorrhage in the literature. We present a case of spontaneous expulsive choroidal hemorrhage and highlight potential etiologies

### **II. Case Report :**

We report a case of 75-year-old male patient presented as an emergency with a history of severe pain of sudden onset and bleeding from his left eye while sitting at home.

His medical history included systemic hypertension, atherosclerosis and pemphigoid bullous. He was undergoing treatment with acetyl-salicylic acid (100mg per day) + clopidogrel (75mg per day) + irbesartan (150mg) + corticosteroids. There was no ophthalmological history in his clinical records. However, the patient stated that he had not seen through his left eye for several years, without knowing the reason. On examination, he had no light perception in the affected eye and 6/6 in the fellow eye. There was extensive prolapse of tissue through a large corneal defect onto the left cheek with blood-clot admixed (Figure 1). The right eye was normal apart cortico-nuclear cataract. An evisceration with a 16 mm acrylic ball implant was performed. The anatomopathological report described an eyeball of about 25mm×25mm with an anfractuous mass, which protruded from the frontal limit, of a brownish-black color that corresponded to a hematoma. From an antero-posterior plane, the eye was completely occupied by coagulated blood, the chamber could not be identified, neither could the remainders of the chorio-retin, the lens or the cornea. There were no trauma cutting elements or malignant lesions.



**Figure 1 :** Patient's condition upon arrival at the emergency

### **III. Discussion :**

An expulsive ocular hemorrhage is a relatively rare complication of intraocular surgery, mainly occurring in cataract interventions (since they are the most frequent ones), but they can also appear in other surgeries like glaucoma or Keratoplasties. The spontaneous form is very unusual, and less than 30 cases were published in medical literature. Predisposing factors include old age, atherosclerosis and other systemic vascular disorders and, particularly, glaucoma and corneal conditions such as ulcers and degenerative processes that can lead to corneal tissue necrosis and its subsequent perforation (1). Another potential cause, which has been rarely reported, is the existence of an intra-ocular tumor.

Our patient had as a predisposing factors for this dramatic event : advancing age, arteriosclerosis, systemic hypertension.

The mechanism that causes Expulsive supra-choroidal hemorrhage is still a matter of debate. Some think that the initial trigger is the hemorrhage followed by the rupture of the cornea due to an increase of intraocular pressure. Others think that the triggering event is the sudden decompression of the eye, due to corneal or sclera perforation, with a frontal massive shifting of the retina and choroid, and a subsequent rupture of the posterior ciliary arteries (2).

In most of the published cases of Expulsive supra-choroidal hemorrhage there is a coexistence of glaucoma and some type of severe corneal damage that enables a spontaneous perforation.

It seems that glaucoma, to get her with systemic vascular factors due to age or atherosclerosis, can be the essential mechanism that triggers this process. Thus, a necrosis of the posterior ciliary arteries would take place due to local ischemia in the place where they penetrate the eye ball, which would favor a greater and more sudden ocular decompression with anterior shifting of all the intra-ocular content in the context of a bullous keratopathy, caused by the glaucoma, which possibly generates a neurotrophic or infectious corneal ulcer; the perforation of which would represent the culmination of the process (3).

### **IV. Conclusion**

In conclusion, our clinical case of a spontaneous expulsive suprachoroidal hemorrhage makes us believe that the cause could lie in an the development of all these quince of events described above, favored, probably, by an involuntary ocular trauma during the night, old age, and a history of high blood pressure and a treatment with anticoagulants.

### **References :**

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