

**3 de Dezembro**

**14h30 | 16h00 – Sala 3**

Moderadores | Chairs: Angelina Meireles (CHUPorto), Mário Ornelas (H. Setúbal), Carla Teixeira (HPH),  
Mário Alfaiate (CHUC), António Sampaio (IMO), Belmira Beltrán(HVFX)

## **VD 6**

### **CHALLENGING APPROACH OF TRAUMATIC HYPOTONY**

Margarida Baptista<sup>1</sup>, Maria Picoto<sup>1</sup>, Sofia Donato<sup>1</sup>, Fernanda Vaz<sup>1</sup>

(<sup>1</sup>Centro Hospitalar Lisboa Ocidental)

**Introduction and Purpose:** Blunt ocular trauma may cause several complications in the anterior and posterior eye chamber. Cyclodialysis results from meridional ciliary muscle fibers detachment in scleral spur, creating abnormal aqueous humor drainage into suprachoroidal space. Management of subsequent ocular hypotony demands a careful approach. The aim of this work is to report the case of a successfully managed traumatic cyclodialysis with associated ciliochoroidal detachment.

**Methods and Materials:** A 65-year-old male victim of a blunt ocular trauma in the left eye (LE) presented in the Ophthalmology Emergency Department complaining of decreased visual acuity. Clinical examination revealed an intraocular pressure (IOP) of 5 mmHg, complete hyphema and a dense hemovitreous when attempted fundus observation. LE best corrected visual acuity (BCVA) was of light perception.

**Results and Discussion:** Ultrasound imaging modes A and B showed a nasal peripheral ciliochoroidal detachment and ultrasound biomicroscopy verified a cyclodialysis cleft. Head and orbital computerized tomography scan did not reveal other complications. Despite medical treatment with topical and oral corticosteroid and atropine for 5 weeks, surgical treatment was required to control the multiple complications of the ocular trauma.

The video presents the surgical technique of phacoemulsification with intraocular lens placing in capsular bag, pars plana vitrectomy combined with endolaser photocoagulation and gas tamponade (perfluoropropane, C3F8).

One month after the procedure, there was resolution of the hypotonic maculopathy, LE BCVA improved to 8/10 and IOP was 17 mmHg with topical antihypertensive therapy (brinzolamide and timolol).

**Conclusion:** Ocular hypotony after blunt ocular trauma is a complex entity. Initial management should be conservative since some patients recover spontaneously or with medical approach. Pars plana vitrectomy combined with endolaser photocoagulation and gas tamponade was a successful management strategy in our case, showing great functional results.