



**UGH syndrome should be considered in every pseudophakic patient, with active unilateral inflammation and elevated intraocular pressure**

### ***The Science behind the Tip***

Uveitis-Glaucoma-Hyphaema (UGH) Syndrome is a rare syndrome characterized by iris transillumination defects, microhyphaemas and pigmentary dispersion, concomitant with elevated intraocular pressure (IOP)<sup>1</sup>. The syndrome is caused by repetitive mechanical trauma of a malpositioned intraocular lens with adjacent structures (iris, ciliary body, iridocorneal angle)<sup>1,2</sup>. It is important to remember that even though the syndrome was initially described in cases with anterior chamber intraocular lenses, recent literature describes UGH with any type of intraocular lens, whether placed in the sulcus or in the bag<sup>3</sup>.

Single piece acrylic intraocular lenses placed in the sulcus carry a high risk of subsequent UGH. Careful clinical examination and a high index of suspicion is crucial for making the diagnosis. Anterior segment imaging such as ultrasound biomicroscopy (UBM) or ocular coherence tomography (OCT), are extremely useful in confirming the diagnosis<sup>1,3</sup>. When the diagnosis is established, initial medical management should include topical steroids, anti-glaucoma medication and cycloplegics, while IOL exchange should not be delayed if vision is reduced, the IOP and inflammation remain uncontrolled or progressive glaucoma is detected<sup>4</sup>.

### ***References***

- 1) Zemba, Mihail, and Georgiana Camburu. "Uveitis-Glaucoma-Hyphaema Syndrome. General review." Romanian journal of ophthalmology vol. 61,1 (2017): 11-17. doi:10.22336/rjo.2017.3
- 2) Accorinti M, Saturno MC, Paroli MP, De Geronimo D, Gilardi M. Uveitis-Glaucoma-Hyphema Syndrome: Clinical Features and Differential Diagnosis. Ocul Immunol Inflamm. 2021 Apr 1:1-6. doi: 10.1080/09273948.2021.1881563. Epub ahead of print. PMID: 33793379.
- 3) Zhang L, Hood CT, Vrabec JP, Cullen AL, Parrish EA, Moroi SE. Mechanisms for in-the-bag uveitisglaucoma-hyphema syndrome. J Cataract Refract Surg. 2014 Mar;40(3):490-2. doi:10.1016/j.jcrs.2013.12.002. Epub 2014 Jan 11. PMID: 24417893.
- 4) Armonaitė L, Behndig A. Seventy-one cases of uveitis-glaucoma-hyphaema syndrome. Acta Ophthalmol. 2021 Feb;99(1):69-74. doi: 10.1111/aos.14477. Epub 2020 Jun 8. PMID: 32511897.

***Contributor: Stylianos A Kandarakis MD, PhD, 1st University Eye Clinic, National and Kapodistrian University of Athens, G. Gennimatas General Hospital, Athens, Greece***

---