Intraocular Lens Dislocation Mimicking an Intraocular Iris

Luxação Posterior de Lente Intraocular Mimetizando uma Iris Intraocular

Ricardo Machado Soares[1], Paula Sepúlveda[1]

[1] Department of Ophthalmology - Centro Hospitalar de Vila Nova de Gaia e Espinho EPE, Vila Nova de Gaia, Portugal

Recebido/Received: 2022-06-16 | **Aceite/Accepted:** 2022-08-07 | **Publicado/Published:** 2022-09-30

DOI: https://doi.org/10.48560/rspo.27387

KEYWORDS: Lens Implantation, Intraocular/adverse effects; Lenses, Intraocular.

PALAVRAS-CHAVE: Implante de Lente Intraocular/efeitos adversos; Lentes Intraoculares.

An 86-year-old woman with history of bilateral phacoemulsification (13 years prior), diabetic retinopathy submitted to several treatments (pan-retinal photocoagulation, anti-VEGF intravitreal injections, and bilateral pars *plana* vitrectomy) and low visual acuity in the left eye (OS) due to retinal fibrosis, presented to the emergency ward with complaints of diminished visual acuity in her right eye (OD). On examination, her best-corrected visual acuity (BCVA) was hand motion in the OD and counting fingers in the OS. Fundoscopy of OD revealed a posteriorly dislocated three-piece intraocular lens (IOL) inside the capsular bag. During *pars plana* vitrectomy, the disposition of the IOL alongside the anterior capsule's phimosis and Soemmering's ring mimicked a light blue iris (Fig. 1). The IOL/capsular bag complex was removed and replaced with an aphakic iris-claw intraocular lens, improving her OD BCVA to 20/25.

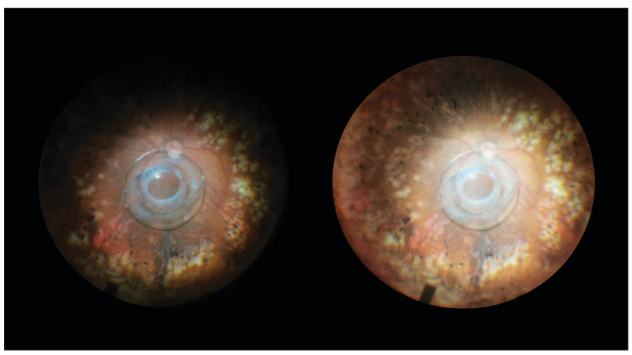

Figure 1. IOL/ capsular bag complex near the posterior pole. Note the anterior capsule phimosis and Soemmering's ring mimicking a light blue iris.

Lens epithelial cells are involved in the pathogenesis of anterior capsule fibrosis and posterior capsule opacification following cataract surgery.[1] In 1928, Soemmering first described a ring of cortical fibers between the posterior capsule and the borders of the anterior capsule remnant, hence the name Soemmering's ring.[2,3] This finding is explained by the active proliferation of equatorial epithelial cells leading to an accumulation of new lens fibers between the equator and the anterior capsule margin/IOL optic.[1,4] In contrast, the anterior epithelial cells undergo fibrous metaplasia leading to fibrosis of the anterior capsule, which leads to capsule phimosis in cases of small capsulorhexis.[1]

CONTRIBUTORSHIP STATEMENT / DECLARAÇÃO DE CONTRIBUIÇÃO:

RMS: Writing - Original Draft, Literature research, Writing - Review & Editing, Visualization.

PS: Writing - Review & Editing, Supervision and Final Approvement.

RESPONSABILIDADES ÉTICAS

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

Fontes de Financiamento: Não existiram fontes externas de financiamento para a realização deste artigo.

Confidencialidade dos Dados: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

Consentimento: Consentimento do doente para publicação obtido.

Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

ETHICAL DISCLOSURES

Conflicts of Interest: The authors have no conflicts of interest to declare.

Financing Support: This work has not received any contribution, grant or scholarship.

Confidentiality of Data: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

Patient Consent: Consent for publication was obtained.

Provenance and Peer Review: Not commissioned; externally peer reviewed.

REFERENCES

1. Pandey SK, Apple DJ, Werner L, Maloof AJ, Milverton EJ. Posterior capsule opacification: a review of the aetiopathogenesis, experimental and clinical studies and factors for prevention. Indian J Ophthalmol. 2004;52:99-112.
2. Tooke FT. Dislocation of the Ring of Soemmering, Its Removal, with Some Notes on Its Pathology. Trans Am Ophthalmol Soc. 1933;31:68-76.
3. Bhattacharjee H, Deshmukh S. Soemmering's ring. Indian J Ophthalmol. 2017;65:1489. doi:10.4103/ijo.IJO_913_17
4. Rönbeck M, Zetterström C, Wejde G, Kugelberg M. Comparison of posterior capsule opacification development with 3 intraocular lens types: five-year prospective study. J Cataract Refract Surg. 2009;35:1935-40. doi:10.1016/j.jcrs.2009.05.048

Corresponding Author/
Autor Correspondente:

Ricardo Machado Soares
Department of Ophthalmology
Centro Hospitalar de Vila Nova de Gaia e Espinho EPE, Unidade 1 -
Rua Conceição Fernandes S/N,
4434-502 Vila Nova de Gaia, Portugal
ricardo.machado.soares@chvng.min-saude.pt

ORCID: 0000-0002-2998-6251