

Free-floating iris cyst in the anterior chamber

Monika Arora ¹, Kanchangouri Satpute ², Saurabh Verma,¹ Abhishek Singh²

¹Ophthalmology, Dr RP Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, Delhi, India
²Dr RP Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, Delhi, India

Correspondence to

Dr Monika Arora;
 mail.monikaarora@gmail.com

Accepted 28 October 2022

DESCRIPTION

A female in her early 50s presented with a complaint of occasional blurring of vision in her left eye, 3 weeks post cataract surgery. Slit-lamp examination revealed a pigmented free-floating iris cyst of approximately 1 cm × 1 cm at 6 o'clock position in the anterior chamber (AC) (figure 1A, B). Ultrasound biomicroscopy (UBM) revealed a free-floating epithelial cyst with an extremely thin wall with no internal reflectivity (figure 1C, yellow arrow). There was another peripheral pigmented epithelial iris cyst with no internal reflectivity (figure 1C, red arrow). Very large cyst floating in AC and a second sessile retroiridial cyst denoting the most likely cause is dislodgement after cataract surgery. Mobilisation of the cyst occurred with the head tilt. Due to her visual disturbance, the excision of the cyst was done.

Iris cysts are classified as primary and secondary with primary being more common. Primary cysts do not have a recognisable aetiology. Secondary cysts develop as a result of trauma, intraocular parasites, tumours or surgery.^{1 2} Despite the fact that the incidence of multiple iris cysts is estimated to be 15.40%–30%, no dislodged cyst in the AC following cataract surgery has been documented.³ UBM allows for the identification of the thin ultrastructure and internal echogenicity of the cysts and detects small cysts, multiloculated or multiple cysts.⁴ The overall incidence of cystic and sheet-like epithelial inclusion cysts after accidental or surgical

intervention of the anterior segment has been estimated to be 0.06%–0.11%.⁵ Free-floating cysts are usually asymptomatic; surgical removal must be considered only for a rapid enlargement or a reduction in endothelial cell count or visual disturbance.²

Learning points

- ▶ UBM is an invaluable tool in the complete workup of an iris cyst.
- ▶ Cataract surgery can result in the dislodgement of iris cysts in the anterior chamber.

Contributors MA contributed to the design of the work and revised for important intellectual content and gave final approval of the version to be published. She is the guarantor. KS contributed to data collection, cleaned and analysed the data and drafted the paper. SV cleaned and analysed the data. AS contributed in data collection.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Consent obtained directly from patient(s).

Provenance and peer review Not commissioned; externally peer reviewed.

Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

ORCID iDs

Monika Arora <http://orcid.org/0000-0001-7453-9496>

Kanchangouri Satpute <http://orcid.org/0000-0003-0439-947X>

REFERENCES

- 1 Cavuoto KM, Villegas V. Free-Floating iris cyst in the anterior chamber. *J Pediatr Ophthalmol Strabismus* 2017;54:64.
- 2 Han LS, Meyer JJ. Iris Cyst. 2022 May 8. In: *StatPearls [Internet]*. Treasure Island (FL): StatPearls Publishing, 2022.
- 3 Konopińska J, Lisowski Łukasz, Mariak Z, et al. Clinical features of iris cysts in long-term follow-up. *J Clin Med* 2021;10:189.
- 4 Ficus M, Ferretti C, Benelli U, et al. Free-Floating cyst in the anterior chamber: ultrasound biomicroscopic reports. *Eur J Ophthalmol* 2003;13:653–5.
- 5 Chaudhry M, Grover S, Sood N, et al. Epithelial iris cyst after cataract surgery. *Nepal J Ophthalmol* 2012;4:191–3.

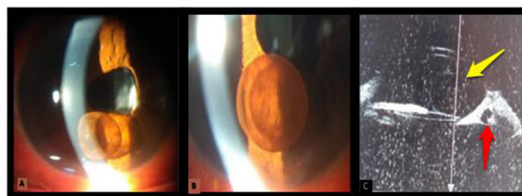


Figure 1 (A, B) Clinical photo showing free-floating cyst in anterior chamber. (C) Ultrasound biomicroscopy showing double cyst: one in the anterior chamber and one behind the iris in the periphery.



© BMJ Publishing Group Limited 2022. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Arora M, Satpute K, Verma S, et al. *BMJ Case Rep* 2022;15:e253527. doi:10.1136/bcr-2022-253527

Copyright 2022 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <https://www.bmj.com/company/products-services/rights-and-licensing/permissions/>
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

Customer Service

If you have any further queries about your subscription, please contact our customer services team on +44 (0) 207111 1105 or via email at support@bmj.com.

Visit casereports.bmj.com for more articles like this and to become a Fellow