Austin Ophthalmology

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Austin Publishing Group

Case Report

# Phacoantigenic Uveitis Following Spontaneous Lens Capsule Rupture: A Case Report

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**Received:** November 03, 2025
**Accepted:** December 10, 2025
**Published:** December 15, 2025

## Introduction

The release of lens proteins through the capsule during hypermature cataracts may trigger an immunological and/or toxic reaction, leading to a clinical picture known as phacoantigenic uveitis [1].

This condition can also occur following cataract surgery, in the context of penetrating ocular trauma, or spontaneously due to changes in capsular permeability.

## Case Presentation

We report the case of a 75-year-old female patient, L.F., with a medical history of type 2 diabetes, who presented to the ophthalmology emergency department with acute onset of a painful red eye and decreased visual acuity.

Ophthalmic examination revealed visual acuity of 2/10 in the right eye and 10/10 in the left eye. Intraocular pressure, measured by applanation tonometry, was 39 mmHg in the right eye.

Slit-lamp examination showed 2+ anterior chamber cells (Tyndall effect), corneal edema, visible lens material in the anterior chamber, and a ruptured anterior capsule (Figure 1).

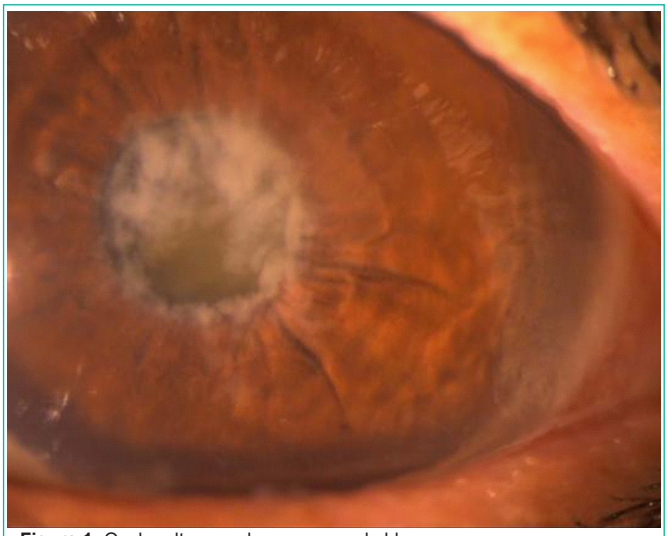

**Figure 1:** Ocular ultrasound was unremarkable.




**Citation:** Essakali Amine, Mahmoudi Marame, Kanboui Marouane, Lakraa Rania, Akkanour Younes, et al. Phacoantigenic Uveitis Following Spontaneous Lens Capsule Rupture: A Case Report. Austin Ophthalmol. 2025; 9(2): 1075.

Ocular ultrasound was unremarkable.

The patient was hospitalized and treated with hypotensive therapy and topical corticosteroids.

She subsequently underwent phacoemulsification with intraocular lens implantation.

Postoperative recovery was uneventful.

## Discussion

Phacoantigenic uveitis is a relatively rare entity, which in this case was secondary to retained lens fragments in the anterior chamber.

The exact pathophysiology remains unclear, involving potential toxic effects of lens proteins, autoimmune responses, or even bacterial immunologic adjuvants [1].

The degree of inflammation is often proportional to the amount of residual cortex, although interindividual variability is significant—some patients may tolerate lens remnants for years without any inflammatory reaction.

Typically, it presents as granulomatous uveitis in chronic forms [2], but other clinical pictures may be dominated by ocular hypertension, with inflammatory signs becoming secondary.

Phacoantigenic uveitis generally responds well to topical corticosteroid therapy, both pre- and postoperatively [3]. Inflammatory signs and elevated intraocular pressure usually resolve quickly. However, recurrence is likely if the underlying cause is not addressed and corticosteroids are discontinued [4,5].

## Conclusion

Advances in cataract surgery techniques and the routine use of anti-inflammatory eye drops have significantly reduced the incidence of this condition, making it increasingly rare.

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