

18th International Conference of the
Research Institute of Ophthalmology

RIO 2026

22 -23 JANUARY 2026
ROYAL MAXIM PALACE KEMPINSKI, CAIRO



A Silent Start, A Sudden Storm

Shaimaa Ibrahim, MD

Mohamed Saad, Msc



Special Thanks

We greatly appreciate the great effort and help of
Prof. Dr. Amr Alshafaey
in managing this case.



Presentation

- 53-year-old female.
- **Complain:** Referred for glaucoma assessment.
- **POH:** Bilateral **phacoemulsification** 2 years ago.
- **PMH:** HTN controlled.
Bundle branch block.



Ophthalmic examination

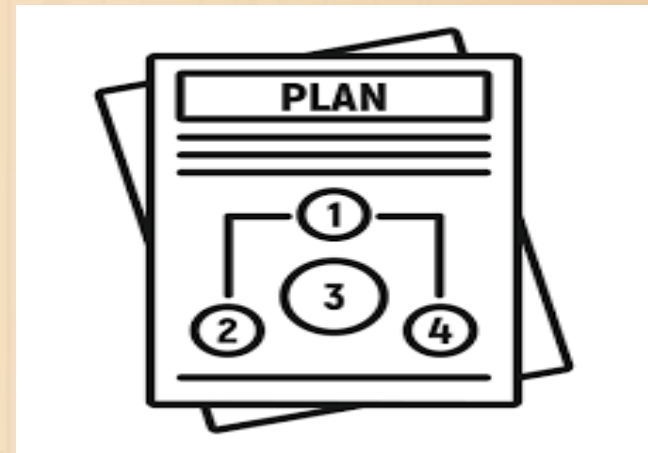


Left eye	Right eye	
6/24	1/60	BCVA
RRR	Sluggish	Pupil
Pseudophakic		Anterior Segment
C/D 0.60	C/D of 0.95	Fundus
Free at all directions		EOM
14	30	IOP
Grade IV	Grade IV	Gonioscopy
BB + CAI.	Full topical anti-glaucoma medication	Treatment

Plan of management

1-Rt SST.

2-To continue on eye drops in the left eye.

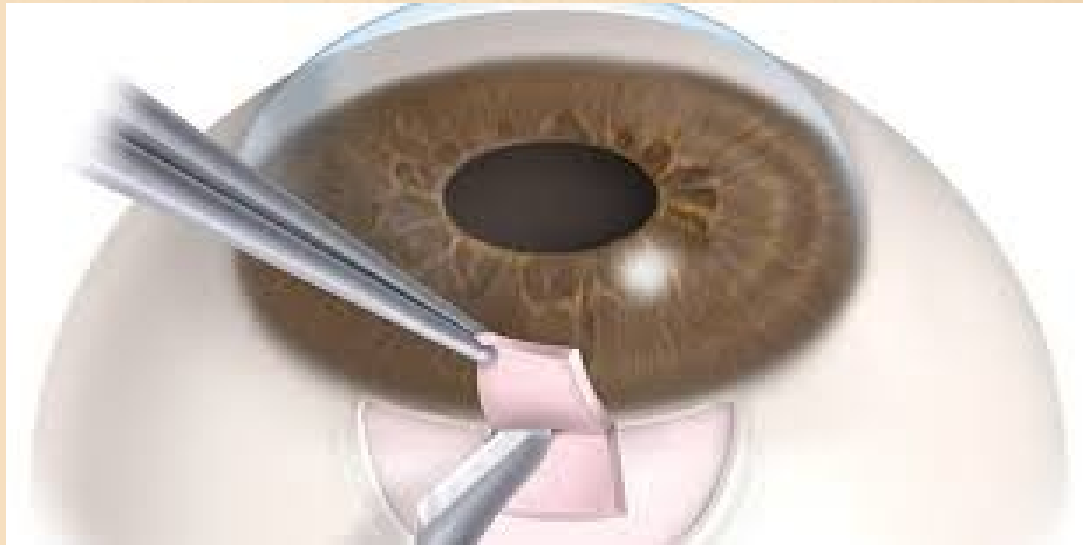


Plan of management

- Routine preoperative labs were ordered.
- All the labs were within the normal limits apart from positive conjunctival swabs for E. coli, for which the patient received topical antibiotics and the test turned negative before surgery.



Uneventful SST with MMC application, under peribulbar anaesthesia.



Follow up



The first-day:

Cornea: clear.

Bleb: Elevated non leaking.

IOP: 10 mmHg.

No obvious fundus abnormalities.



After one week,

the patient presented with
the same picture.

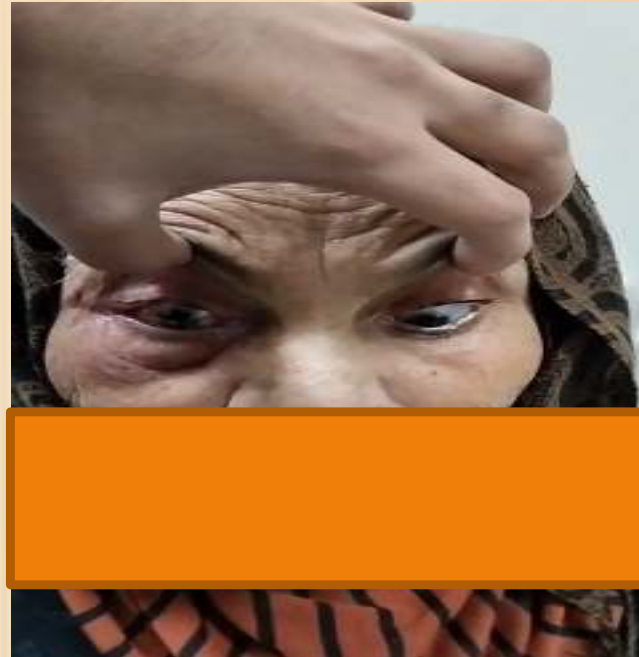


Then the storm started



R10 2026

- Ten days later



Right hypertropia with limited ocular motility
in the inferior gaze associated with
conjunctival chemosis



- So now we are dealing with a case of uneventful glaucoma surgery, developed orbital swelling.
- At this moment many differential diagnoses jumped to our minds.



Orbital
Abscess /
Cellulitis

Orbital / Retro
bulbar
Hemorrhage

Central (stroke)

Allergy to
drug/
anesthetic
? agent

R10 2026

Fighting winds

- **CBC** normal limits.
- **ERS** was slightly elevated.
- Temp and Blood pressure.
- **MRI brain and orbit** was done to exclude both central and local causes.



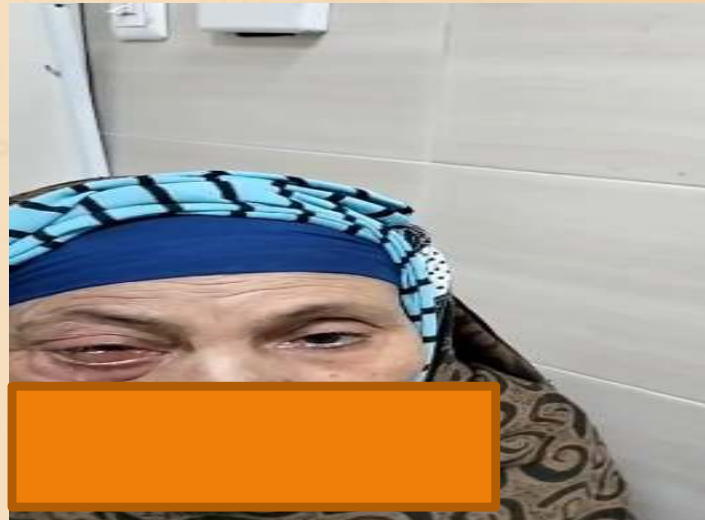
Fighting winds

- Broad spectrum **systemic antibiotics**.
- Low dose **systemic steroids**.
- **Preservative free** eye drops were prescribed.



Cracks Deepen

- 2 days later **limited ocular motility in the lateral gazes** with **marked conjunctival chemosis**.



Management

Hospitalization.

Intravenous antibiotics.

(3rd-generation cephalosporins & metronidazole)



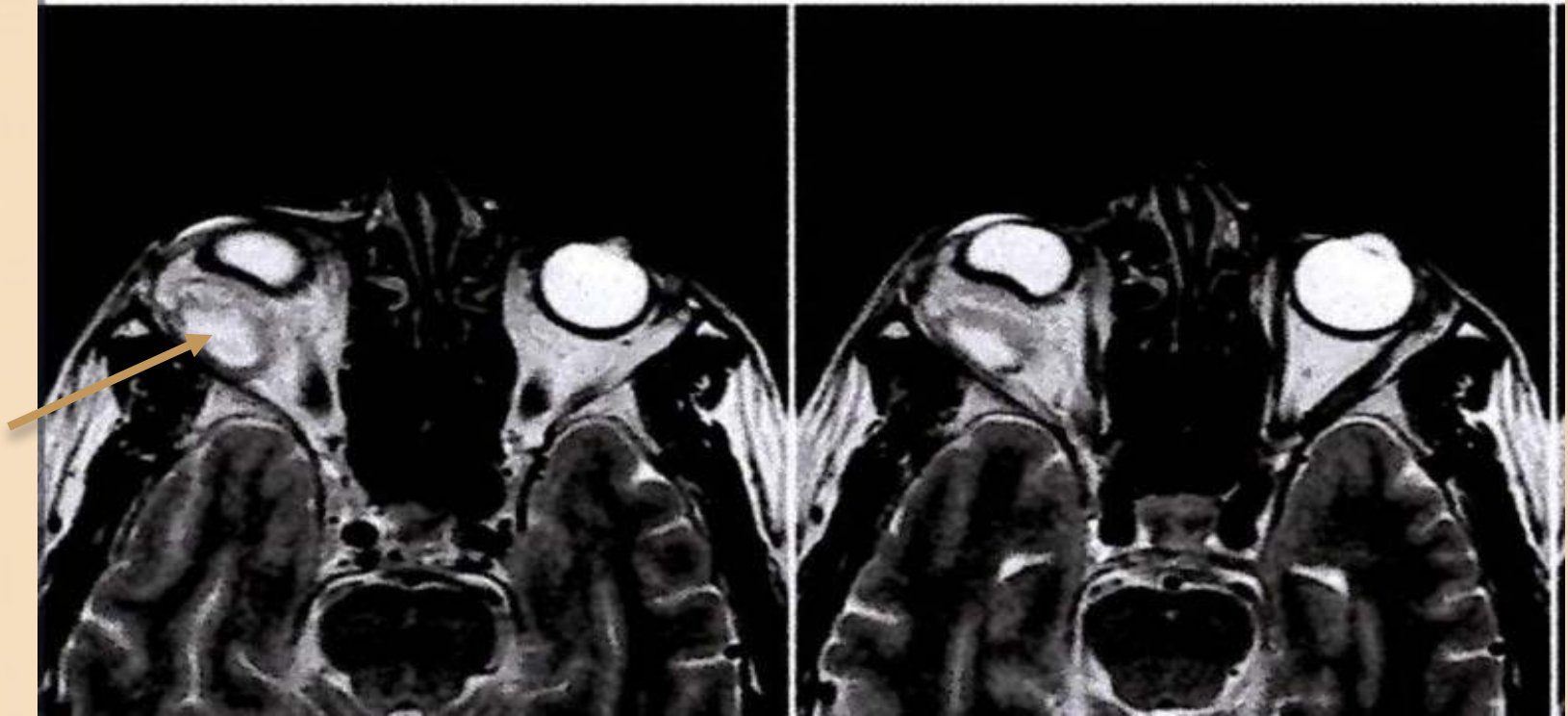
Losing Ground

- One day later: Case worsened more, frozen globe developed.



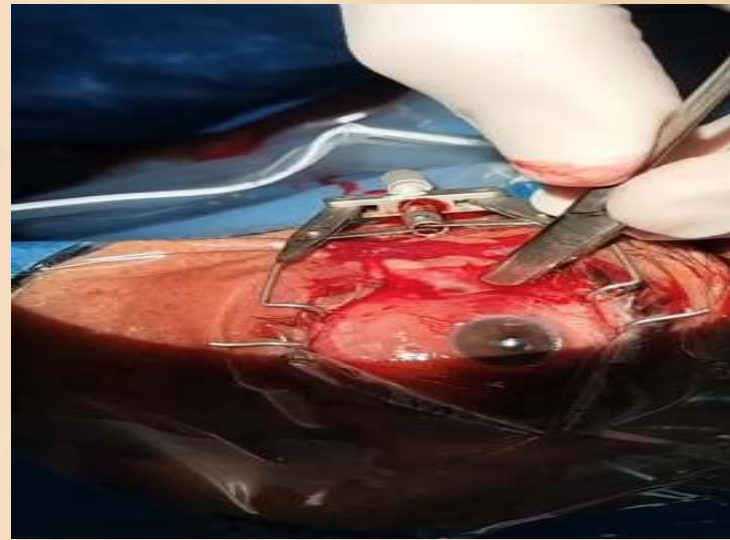
MRI

- MRI orbit returned with orbital collection.



Fighting Back

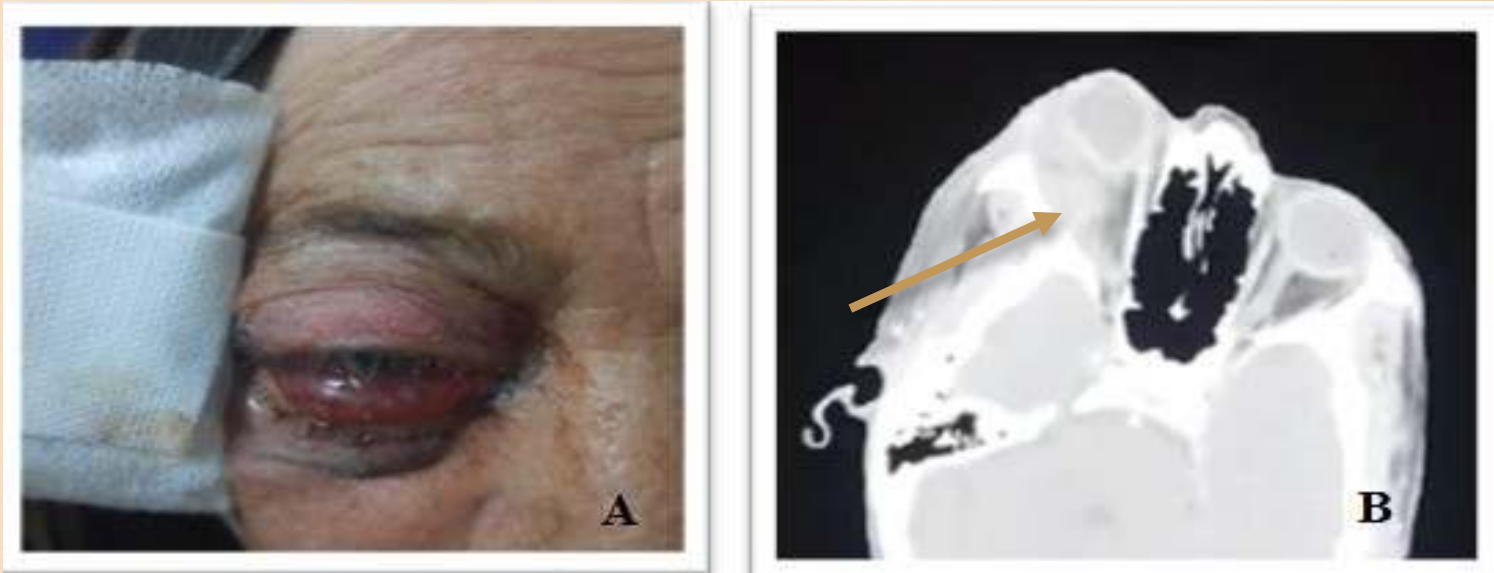
- **Lateral canthotomy, inferior cantholysis and evacuation for orbital collection.**



**So despite absent fever and almost normal labs.
.Orbital abscess diagnosis was confirmed**

Falling Further, and Struggle Within

- Four days later
patient redeveloped marked **proptosis** with progressive conjunctival **chemosis**.
- CT was ordered showing collection.



Falling Further, and Struggle Within

Orbital evacuation was reperformed with an orbital drain.



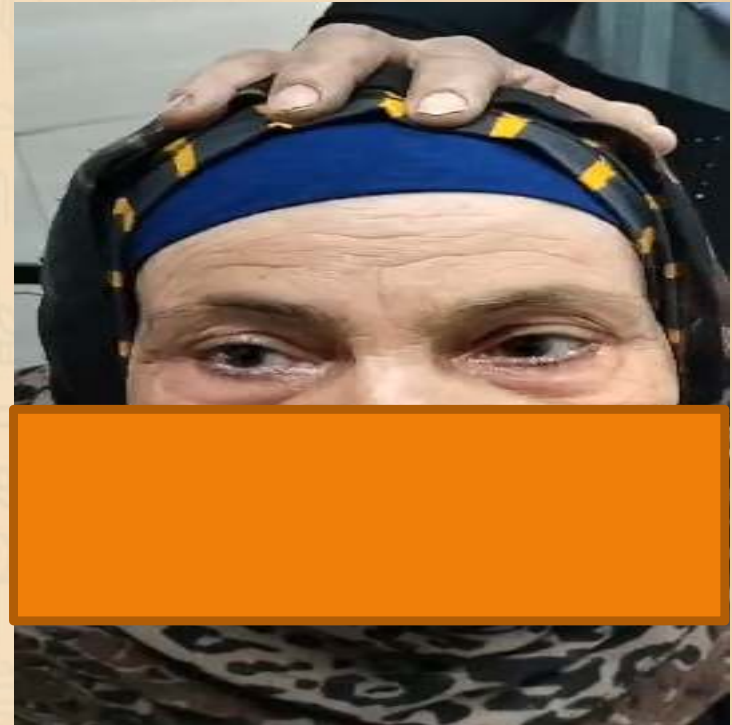
Gentle Dawn and Steady Rise

- **After one week**, patient showed regression of proptosis and conjunctival chemosis.

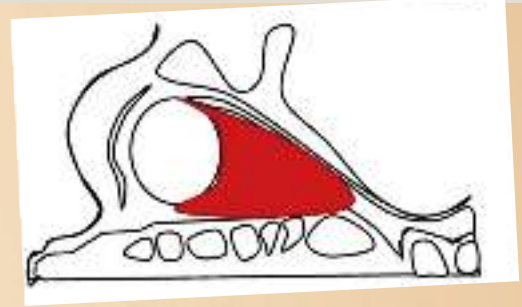


Gentle Dawn and Steady Rise

- Three weeks later, the patient started to regain ocular motility.
- Complete recovery of ocular motility was noticed after additional two weeks.



Orbital abscess



- Very rare but **life- and sight-threatening** condition.
- Due to different aetiologies, such as trauma, sinusitis, dental infection and postoperative infections.
- Usually presents with **pain, defective ocular motility, decreased vision, and lid oedema and proptosis.**
- Fever, lethargy and headache, may also present especially in large abscesses.
- Early detection and management is crucial given its close proximity to vital structures such as **the optic nerve and the potential for rapid intracranial spread.**

Orbital Abscess

- The **Chandler Classification** used to **grade the severity** of orbital complications (in the context of acute sinusitis).

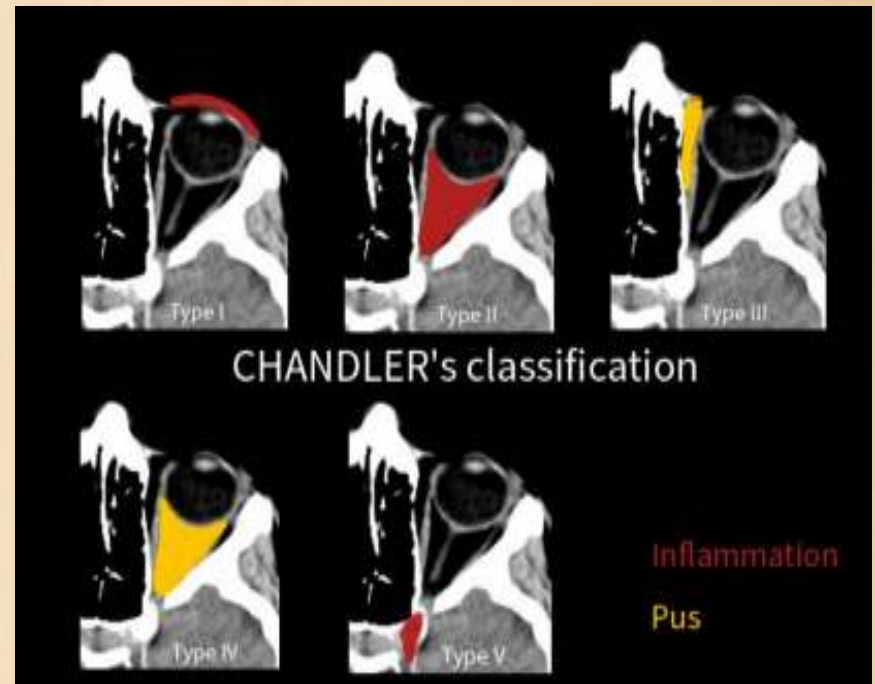
Group 1: Preseptal cellulitis.

Group 2: Orbital cellulitis.

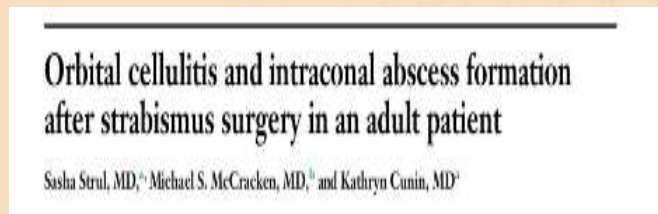
Group 3: Subperiosteal abscess.

Group 4: Orbital abscess.

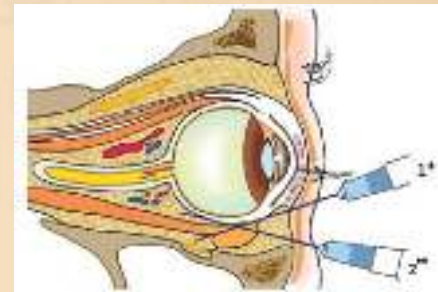
Group 5: Cavernous sinus thrombosis.



- 10 cases of **orbital cellulitis** reported following **glaucoma drainage** implantation (5 cases involved tube exposure).
- Only one case of late-onset **panophthalmitis** and **orbital abscess**, was associated with a thin **avascular bleb**, presented 6 years after surgery.
- **Orbital abscess and orbital cellulitis** have been reported following **strabismus surgery, scleral buckle, orbital blowout fracture and orbital implant** surgeries.



- **No publications** concerning early postoperative orbital cellulitis following SST surgery.
- **Our case is unique** in that:
 - The patient did not experience systemic symptoms until late, (may be d.t. localized nature of the disease).
 - Our patient did not show any ocular source of infection.
 - Moreover, the ocular signs developed over several days.
- Owing to the absence of both predisposing factors and that the surgery did not harm the orbital septum, we suggest **that local anesthesia** could be the source of infection.



:.Orbital complications due to LA

- Publications have reported **orbital cellulitis** following **cataract** surgery under both peribulbar or subtenon **anesthesia**, which occurs nearly within the **first week after surgery**.

Case Reports > GMS Ophthalmol Cases. 2015 Jan 16;5(1):23. doi: 10.12688/gms.oc.2015.1.00023.
eCollection 2015.

Orbital cellulitis following cataract surgery under peribulbar anaesthesia

Chandoshi Mukherjee ¹, Arjit Mitra ¹, Eshra Mushaq ¹

Case Reports > Anaesthesia. 2004 Apr;58(4):411-3. doi: 10.1111/j.1365-2044.2004.03728.x.

Acute orbital cellulitis after sub-Tenon's eye block

M M K Muqit, S Saickasimova, M Gavin

- To our knowledge only one case of **orbital abscess** has been reported after **phacoemulsification**.
- Orbital **abscess** has also been reported after posterior **subtenon steroid** injection.

Case Reports > Clin Exp Ophthalmol. 2002 Dec;30(8):430-1. doi: 10.1096/j.1544-4017.2002.3005430.x.

Orbital abscess following uncomplicated phacoemulsification cataract surgery

Rona Irvine ¹, Alan A. McElab

Case Reports > Orbit. 2017 Jun;36(1):103-104. doi: 10.1080/01650676.2017.1329454. Epub 2017 Mar 31.

Orbital abscess following posterior subtenon injection of triamcinolone acetonide

Mehesh Bhargava ¹, Lisa McKenna ¹, Elizabeth McEneaney ¹, Raul Connel ¹, Tim Richter ¹

- E.coli is a rare cause of orbital abscess, it can cause aggressive endogenous panophthalmitis.

A Case of Escherichia coli Endogenous Panophthalmitis and Orbital Cellulitis With Normal Workup for Primary Focus

Pooja F. Misra^{1,2,3}, Sahar Elkhayari², Rameen Al Thagafi², Deepa Srivastava¹

- **Hyaluronidase toxicity** can mimic this case but it usually respond to steroids.

> Clin Exp Ophthalmol, 2013; 41(2):122-6. doi: 10.1111/j.1442-4001.2012.02834.x.
Epub 2012 Aug 31.

Hyaluronidase toxicity: a possible cause of postoperative periorbital inflammation

Katherine Zamora-Ajaja¹, Sacha Moore, Brian Leatherbarrow, Jonathan H Norris, Damien S Lake, Raman Mahotra, Dinesh Seka, Michael Goggin

CASE SERIES

Vision-threatening reactions of hyaluronidase after local anesthesia: A case series and review of literature

Singh, Arti; Singh, Kamaljeet; Rana, Jagriti; Singh, Upasna; Sharma, Anirudh; Bussat, Virendra; Author Information@

Indian Journal of Ophthalmology - Case Reports 6(3): 888-891, Jul-Sep 2022. | DOI: 10.4103/ijoo.IJO_2143_22

Take Home Message



- Orbital abscess is an extremely rare condition following ocular surgery, but **life- and sight-threatening** .
- Strict adherence to preoperative **infection control measures**, including meticulous aseptic technique and vigilance for early signs of orbital infection, is vital to prevent these complications.
- **Accurate and rapid interventions** are very important for saving these patients.

CASE REPORT

PEER REVIEWED | OPEN ACCESS

Postoperative orbital abscess with total ophthalmoplegia following uncomplicated subscleral trabeculectomy: A rare complication with complete recovery of ocular motility after drainage, a case report

Shaimaa Ibrahim Gafar, Mohamed Saad Emam

ABSTRACT

Introduction: Orbital abscess (OA) is a very rare condition in which there is a collection of purulent discharge behind the orbital septum. It may lead to both serious ocular and systemic complications with high morbidity and mortality. It usually occurs as a sequelae of orbital cellulitis, post-traumatic and rare postoperative complications.

Case Report: A 53-year-old female patient who underwent an uneventful subscleral trabeculectomy (SST) for advanced primary open angle glaucoma. Ten days after surgery the patient developed limited motility in the inferior gaze of the operated eye with conjunctival chemosis which progressed to total ophthalmoplegia after a few days. An orbital magnetic resonance imaging (MRI) was performed for her and revealed orbital collection. **Management and outcome:** The patient was hospitalized and started empirical broad-spectrum antibiotics. Unfortunately, the patient deteriorated much further, necessitating surgical evacuation.

Conclusion: Orbital abscess is a very rare complication that may require urgent intervention to secure not only the patient's eye but also her life.

Keywords: Ophthalmoplegia, Orbital abscess, Trabeculectomy

How to cite this article

Gafar SI, Emam MS. Postoperative orbital abscess with total ophthalmoplegia following uncomplicated subscleral trabeculectomy: A rare complication with complete recovery of ocular motility after drainage, a case report. J Case Rep Images Ophthalmol 2026;9(1):1-5.

Article ID: 100050Z17SG2026

doi: 10.5348/100050Z17SG2026CR

INTRODUCTION

Subscleral trabeculectomy (SST) is the gold standard technique for the management of nearly most glaucoma cases. Many complications, either intraoperative or postoperative, have been reported to be associated with SST. No publication has reported orbital abscess following SST; to best of our knowledge, only ten cases of orbital cellulitis have been reported following the use of glaucoma drainage devices [1-10].

CASE REPORT

A 53-year-old female patient was referred for the management of uncontrolled primary open angle glaucoma. She had a surgical history of bilateral phacoemulsification approximately two years prior. She had a medical history of controlled hypertension and, right bundle branch block; otherwise, the patient was systemically free. On presentation, her visual acuity (VA) was 1/60 in the right eye and 6/24 in the left eye. Her

Shaimaa Ibrahim Gafar¹, Mohamed Saad Emam²

Affiliations: ¹MD, FRCS Glasgow, Glaucoma consultant, glaucoma, Memorial Institute for Ophthalmic Research, Giza, Egypt; ²MSc, Glaucoma specialist, glaucoma, Memorial Institute for Ophthalmic Research, Giza, Egypt.

Corresponding Author: Shaimaa Ibrahim Gafar, Ibrahim Gafar Villa, Tunisian Canal Street, Mansoria, Imbaba, Giza, Egypt; Email: shaimaahibrahimhusein@gmail.com

Received: 29 October 2025

Accepted: 30 December 2025

Published: 17 January 2026



**Support free nations in
opposing Zionist plans**