

17TH INTERNATIONAL CONFERENCE OF THE
RESEARCH INSTITUTE OF OPHTHALMOLOGY

RIO 2025

*Anterior Segment Eye Diseases
Current Status & Future Directions*



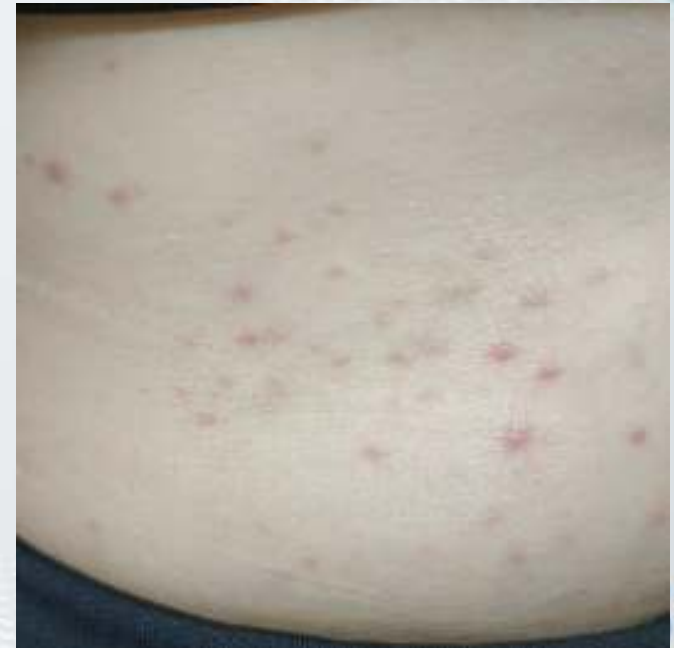
A rising clinical entity in uveitis

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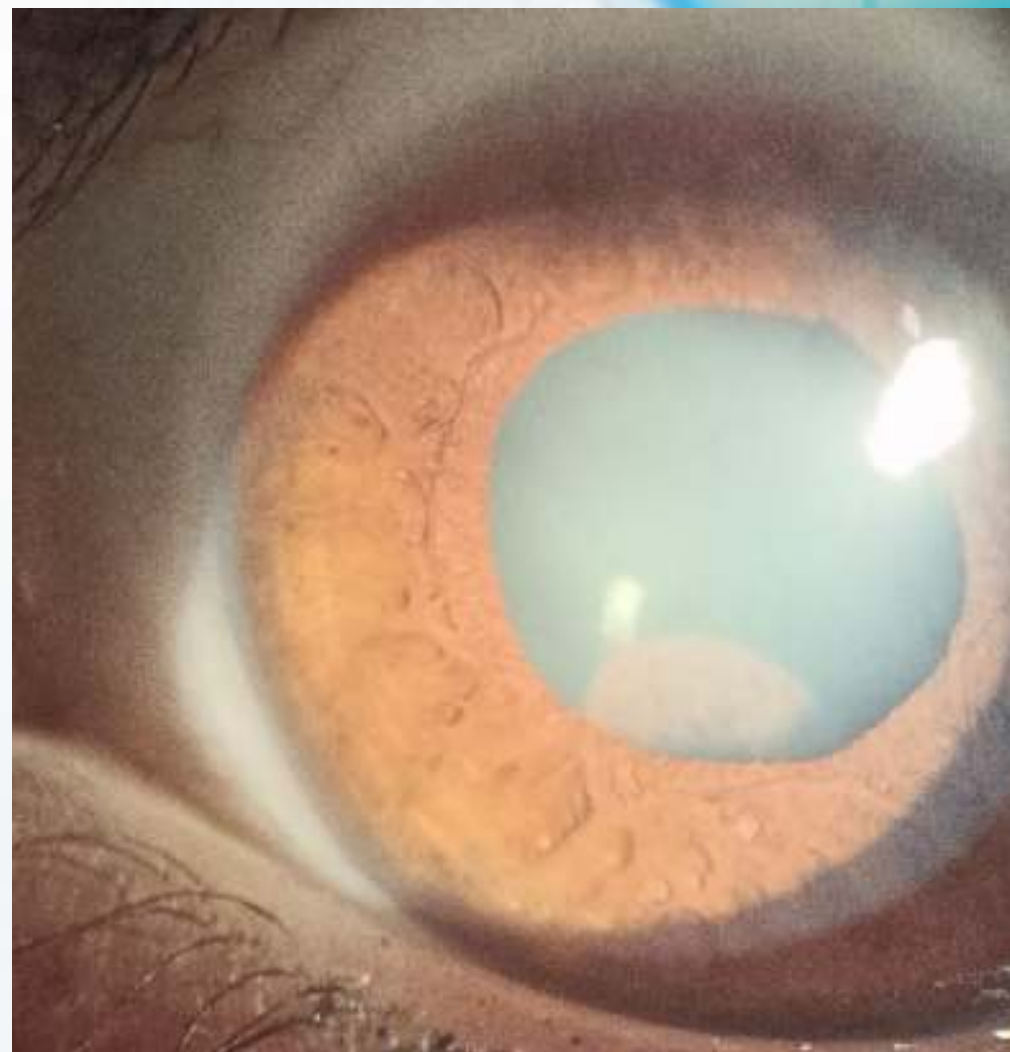
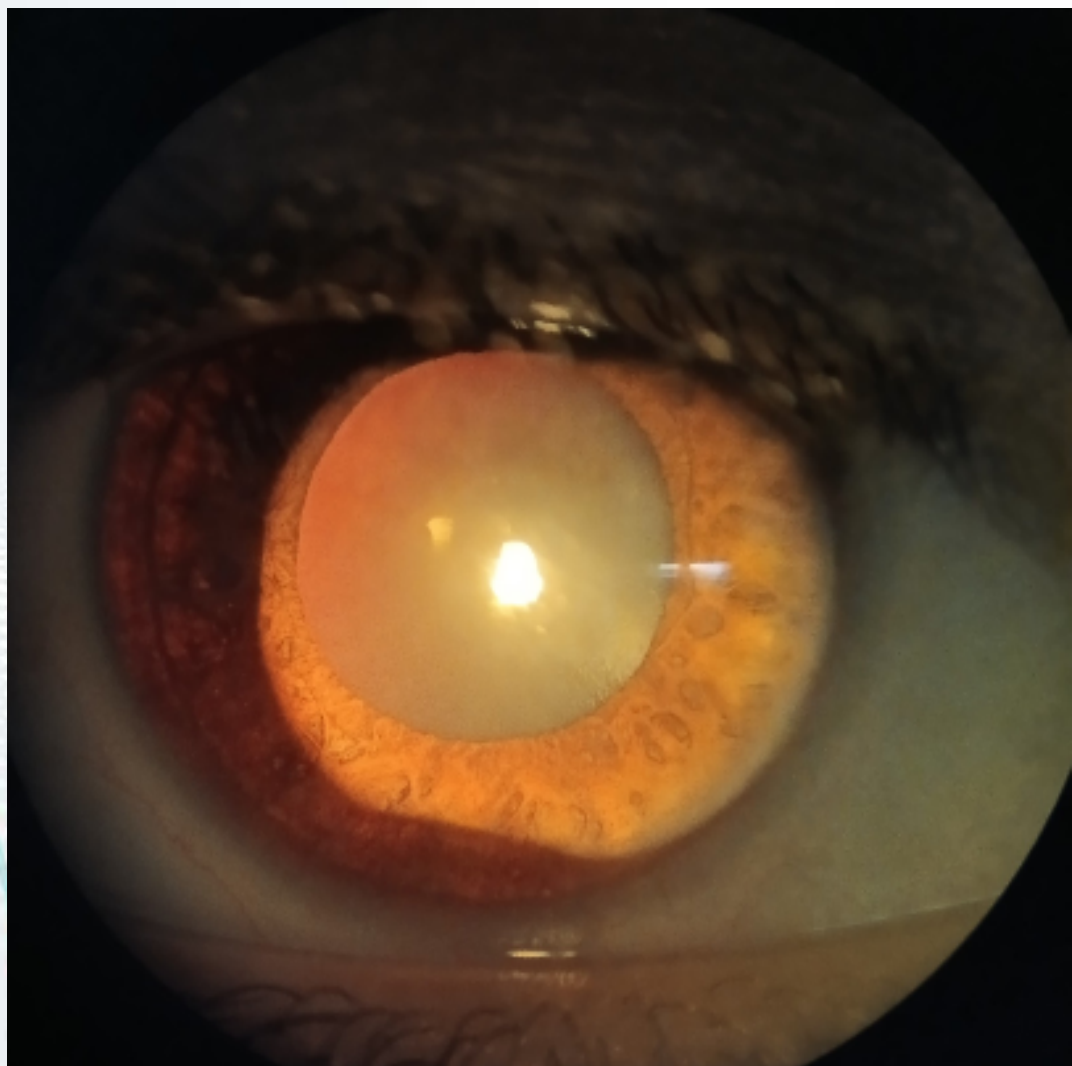
Case 1

- 23 years old female patient, smoker, No DM or HTN.
- Presented by acute bilateral redness and DOV, 1 month duration.
- Associated oral and skin lesions.
- After severe URT infection and unknown parenteral and oral therapy.
- On Xolamol 1x2, Brimonidine 1x2, Tobradex 1x6, Nevanac 1x2.
- No past Hx of systemic or ocular disease



Examination

	Right eye	Left eye
VA	0.16	0.16
IOP	40	43
cornea	Endothelial pigmentary dust	Endothelial pigmentary dust
AC	+4 pigmentary reaction	+ 4 pigmentary reaction
Pupil	Mid-dilated, fixed	Mid-dilated, fixed
Iris	Depigmented & Dense pigments on iris	Depigmented & Dense pigments on iris
Lens	Pigments on anterior capsule	Pigments on anterior capsule Inferior lens large pigmentary print.
vitreous	NAD	NAD
Fundus	NF , CDR 0.3	NF , CDR 0.3
Gonio	Heavily pigmented open angle	Heavily pigmented open angle



Lab. Workup:

Platelets count	14.5	%	150.00- 450.00
White cell count	248	$10^3/\text{cmm}$	4.00- 11.00
	12.9	$10^3/\text{cmm}$	
<u>Differential white cell count :</u>			
	<u>Relative</u>		<u>Absolute</u>
	<u>Result %</u>	<u>Normal</u>	<u>Result / cmm</u> <u>Normal</u>
Neutrophils	60	50 - 70	7740 2000 - 7000
Bands	3	0 - 5	
Segmented	57	45 - 65	
Lymphocytes	34	20 - 40	4386 800 - 4000
Monocytes	4	1 - 10	516 200 - 1000
Eosinophils	2	1 - 6	258 20 - 500
Basophils	0	0 - 2	0 0 - 100

COMMENT : WBCs shows : Leucocytosis
Differential count shows : Absolute Neutrophilia & Lymphocytosis

Laboratory diagnosis		
TEST	Result	UNIT
C-Reactive Proteins (CRP)	10.2	mg/l
Comment : Quantitative Turbidimetric assay		
ESR 1st hr	33	mm/hr
ESR 2nd hr	68	mm/hr

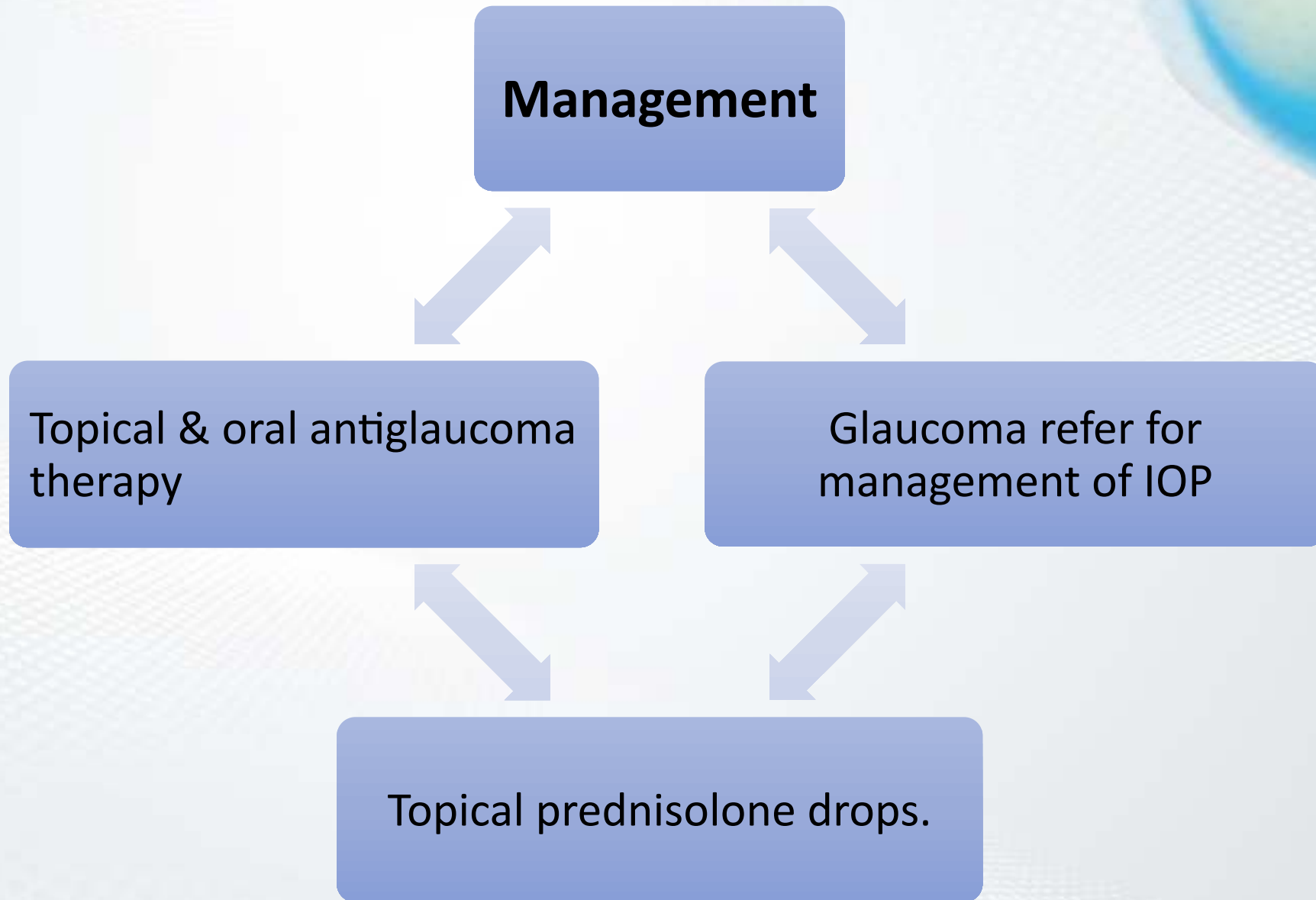
**After revision of her
drug intake..**

Xoraxan by
Colman
Dada

Diagnosis....

Bilateral Acute Depigmentation of the Iris

[BADI]



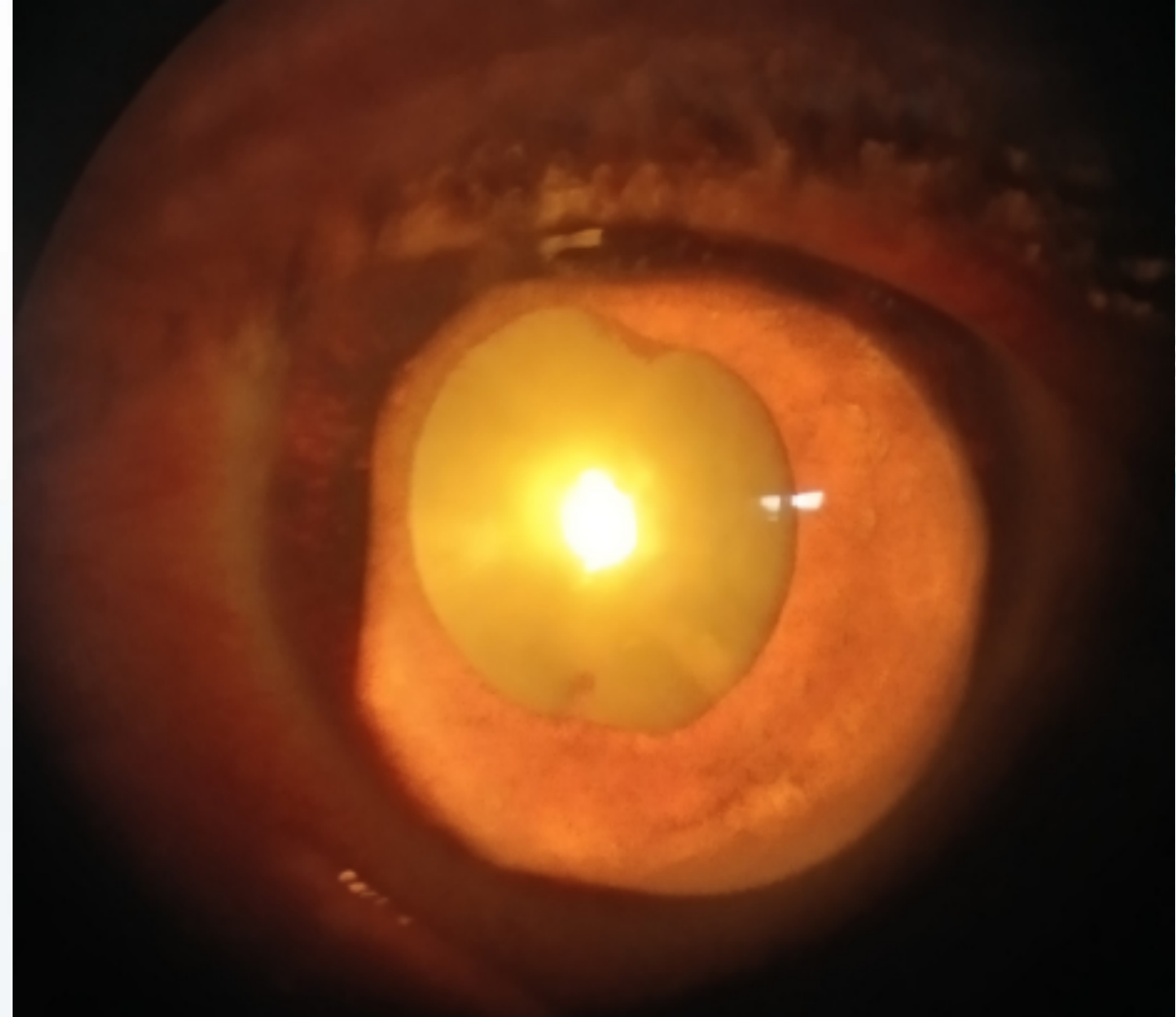
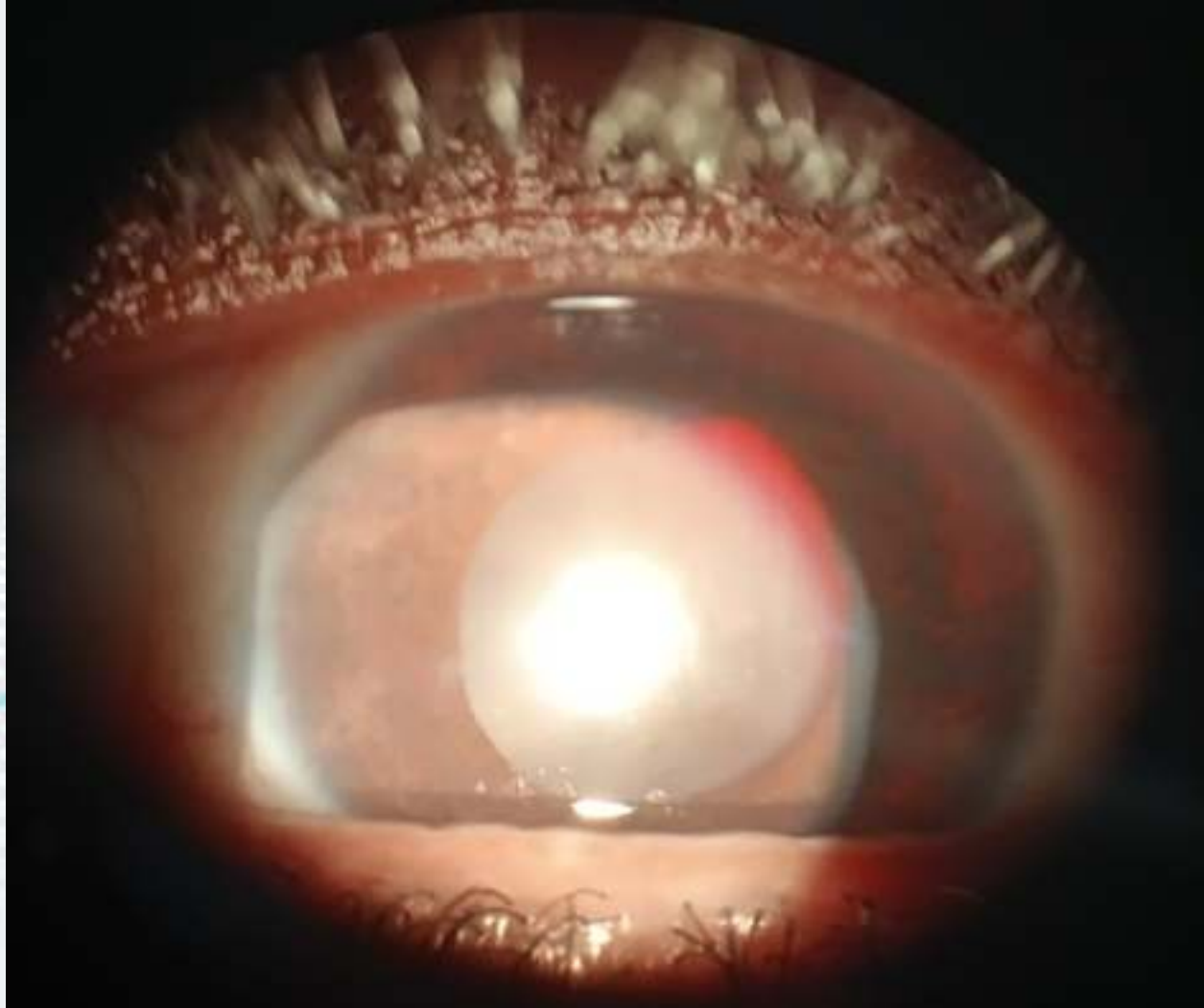
Case 2

- 64 years old female patient, No DM, HTN on ttt.
- Presented by acute bilateral alternating redness and DOV, 1 month duration.
- No associated systemic manifestations.
- After severe URT & dental infection treated by oral Amoxicillin / clavulanic acid therapy.
- No past Hx of systemic or ocular disease except skin allergy and OA.



Examination

	Right eye	Left eye
VA	0.05	0.05
IOP	12	12
cornea	Endothelial pigmentary dust	Endothelial pigmentary dust
AC	+3 pigmentary reaction	+ 4 pigmentary reaction
Pupil	RRR	upper focal PS.
Iris	ITDs & Dense pigments on iris	ITDs & Dense pigments on iris
Lens	Pigments on anterior capsule, PSC.	Pigments on anterior capsule, dense PSC.
vitreous	NAD	NAD
Fundus	Tigroid	Tigroid



Lab. Workup

- **CBC:** Normal.

- **ESR:** 35, 71. ↑

- **CRP:** 13.5 ↑

- **Viral Serology:**

- +ve HSV-I IgG, -ve IgM

- +ve HSV-II IgG, -ve IgM

- +ve CMV IgG, -ve IgM

- -ve VZV IgG, -ve IgM

Management

- BAIT was considered
- Topical steroids & cycloplegic drops with follow up of IOP.
- After 2 months of improvement ... IOP highly elevated **38, 40** (OU).
- Oral & topical antiglaucoma drugs were prescribed.



Bilateral acute iris transillumination (BAIT) syndrome: literature review

This article was published in the following Dove Press journal:
Clinical Ophthalmology

Jean Marc Perone 
Dimitri Chaussard
George Hayek 

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Abstract: The authors conducted a literature review about bilateral acute iris transillumination (BAIT) syndrome, a new and relatively unknown syndrome that should be described and made known to the greatest number to avoid potential diagnostic and therapeutic errors. The first cases date back only to 2004 and a total of 79 cases have been published to date, mainly in Europe and especially in Turkey and Belgium. It mainly affects young women between the ages of 30 and 50, and symptoms are often preceded by an upper airway infection. There is also a majority of cases where the onset of the syndrome follows oral intake of moxyfloxacin. The clinical signs are dominated by strong photophobia, secondary to a spectacular transillumination of the iris. Other classical symptoms are conjunctival infection, eye pain, blurred vision, temporary ocular hypertonia, fixed mid-dilated pupils, and pigment dispersion in the anterior chamber with pigmentary deposits in the trabecular meshwork in gonioscopy, symptoms that may be mistaken for uveitis. After a few weeks or months of evolution,



Bilateral Acute Iris Transillumination (BAIT) & Bilateral Acute Depigmentation of the Iris (BADI)

- First described in the mid-2000s.
- Common in Middle Eastern and European population
- More common in young females in their 30s-40s after an upper respiratory illness or use of systemic antimicrobials, particularly moxifloxacin.
- **BADI and BAIT are likely on the same spectrum.**
- **BADI** results from acute onset depigmentation of the iris without transillumination or pupillary sphincter defects.
- **BAIT** characterized by presense of pupillary defects.
- The released pigment deposits into and occludes the TM often resulting in IOP increases, although with a lower rate in **BADI**.
- The pigment dispersion is from the iris pigment epithelium in BAIT and stroma in BADI.

Etiology

- Systemic antimicrobials, particularly moxifloxacin (also topical or intracameral).
- Also, other antibiotic therapies have been reported.
- Interestingly sensitivity to fluoroquinolone toxicity has been associated with HLA-B51 and HLA-B27 positivity in 40% and 20% of affected patients, respectively, in one study suggesting an underlying autoimmune aspect.
- Systemic viral infections, including coronavirus disease 2019, may be the triggering event in several cases.
- Serologic studies for viral etiologies are often negative for acute infections.

Case Report

Bilateral Acute Iris Transillumination Syndrome after Topical Moxifloxacin/Dexamethasone Initially Misdiagnosed as Uveitis: Case Report

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Andrea Lima Barbosa^c Maria Vitória Moura Brasil^a

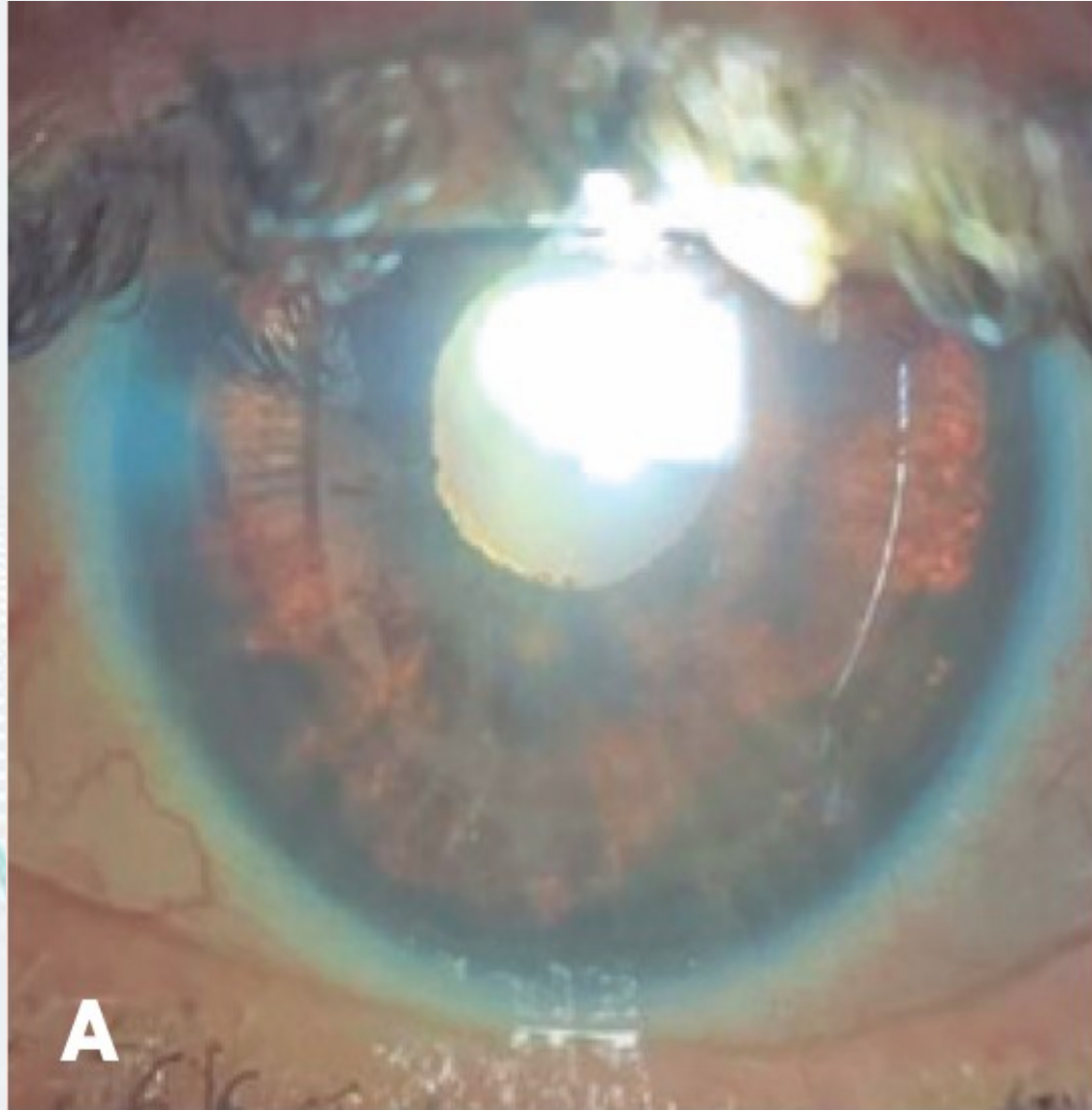
^aInstituto Brasileiro de Oftalmologia (IBOL), Rio de Janeiro, Brazil; ^bMoorfields Eye Hospital, NHS Foundation Trust, London, UK; ^cHospital Quinta D'Or, Rio de Janeiro, Brazil

Abstract

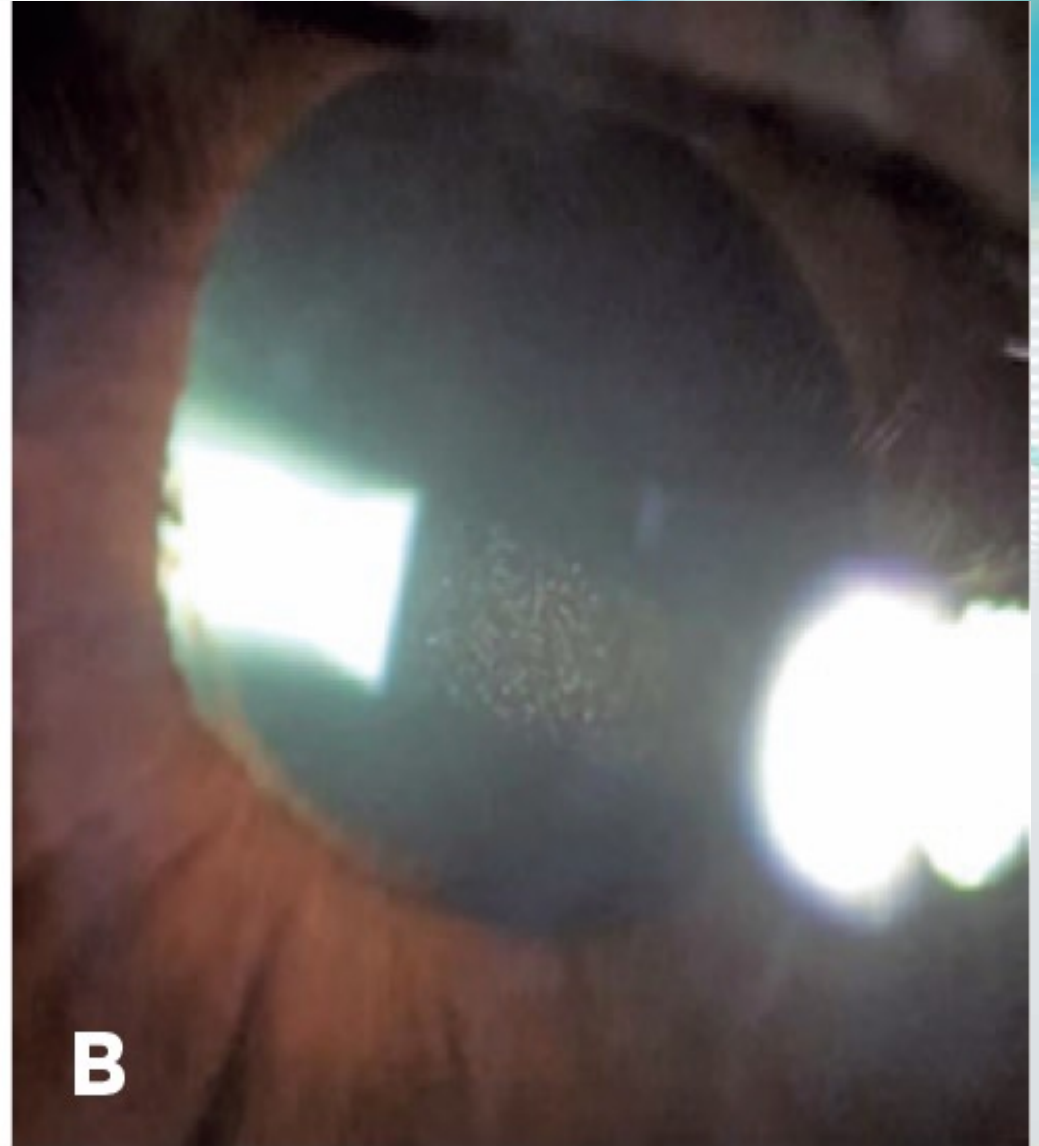
Bilateral acute iris transillumination (BAIT) syndrome is a rare condition of unknown etiology, characterized by acute onset of pigment dispersion in the anterior chamber, depigmentation of the iris, and heavy pigment deposition in the anterior chamber angle, with bilateral involvement in most cases. We present a case of a 46-year-old healthy woman, who developed BAIT in both eyes, following the use of topical moxifloxacin/dexamethasone for bilateral bacterial conjunctivitis, followed by a nonarteritic anterior ischemic optic neuropathy in the left eye.

Clinical Presentation

- Depigmentation of the iris often occurs at the iris root.
- While pigmentary cells are evident in the anterior chamber, inflammatory cells are not.
- Ocular hypertension can result as well.
- Gonioscopy reveals heavily pigmented trabecular meshwork (especially inferiorly) with an open angle.
- Diffuse fine pigment on the corneal endothelium is often noted but keratic precipitates are absent.
- In BAIT, diffuse patchy bilateral iris transillumination defects with pupillary mydriasis from sphincter paralysis are often seen.
- It is often symmetric although asymmetric cases have also been reported.
- Posterior synechiae was found in 25%-50% of affected eyes.



A



B

Management & disease course

- Topical corticosteroids have been used.
- In cases of elevated IOP, almost half of affected eyes are refractory to anti-glaucoma medications, some requiring filtration surgery or Laser iridoplasty in cases of segmental posterior iris bowing.
- Follow-up exams reveal decreases in pigmentary release although the duration of time for resolution varies between 2 weeks to 14 months in some cases.
- Some cases of BADI have shown some, but not complete, repigmentation of the iris after 3-4 years.

Take Home Message

- **BADI** and **BAIT** are relatively rising clinical entities in uveitis and glaucoma.
- An increased awareness of the presentation patterns of BADI and BAIT will ensure timely diagnosis and avoid unnecessary investigations.
- History of **URT infection** &/or **Antibiotic** drug intake is the clue for diagnosis.

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*Thank
you!*