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Case Report

# Triamcinolone-induced Pseudohypopyon

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## Presentation

After obtaining written consent regarding the potential for posterior capsular rapture, a 21-year-old female with a posterior polar cataract in the left eye was planned for phacoemulsification with a foldable single-piece hydrophobic intraocular lens with a provision for a backup three-piece IOL in case of any unlikely event. Intraoperatively, the vitreous body prolapsed into the anterior chamber following an inadvertent posterior capsular rupture that occurred during irrigation/aspiration procedure. We stained the vitreous with 20 mg/ml of triamcinilone acetonite and performed a thorough anterior vitrectomy. After inserting a three-piece hydrophobic IOL into the sulcus, a thorough lavage was done to eliminate any remaining TA. On the first postoperative day, a slitlamp examination revealed TA crystals adhering to the iris crypts and forming a pseudohypopyon in the anterior chamber. Visual acuity was unaided (6/9) OS. The anterior chamber revealed 2+ cells and flare, and the IOP by GAT was 18 mm Hg. A vitreous herniation-related superior pupil peak was seen. The posterior segment examination revealed a minor deposit of TA in the vitreous cavity. The patient was started on a combination of moxifloxacin 0.5%, prednisolone 1% eight times, and nepafenac three times daily for the next week. A specular microscopy examination was conducted, which revealed a cell density of 2346 cells/mm2. We had two plausible options in this strange scenario now.

- Perform GAT and specular microscopy at every visit and monitor AC activity at every visit, every 3 days for a week followed by a weekly follow-up for a month
- Perform an irrigation aspiration procedure promptly and send the aspirate for gram staining, KOH, culture sensitivity, and light microscopy tests.

Since In this instance, the deposits immediately revealed their crystalline nature on the slit lamp examination; they were identified as TA exclusively. Also there was no IOP rise therefore, we decided to monitor for spontaneous TA clearance via the aqueous route. The TA crystals disappeared spontaneously in a single week. The GAT and specular microscopy values were found within normal limits on every visit.

## Discussion

The vitreous gel's transparency under an operating microscope contributes primarily to the difficulty of vitreous cleaning during cataract surgery. Surgeons must use indirect evidence to determine the extent and location of vitreous gel in the anterior chamber, even when its presence is obvious [1,2]. We attribute the pseudohypopyon in our case to the remnant TA passing from the vitreous cavity to the anterior chamber through the posterior capsular rent due to eye movements [3]. This condition could also be an aseptic-inflammatory reaction against the TA excipient. Literature reports that 0.6% of 65 patients who received TA preparations had sterile endophthalmitis. Unlike infective endophthalmitis, which is characterised by intense anterior chamber inflammation, hypopyon formation, and fibrin formation, sterile endophthalmitis typically causes less pain, less redness, and less edoema and chemosis [4]. The corneal endothelium also tolerates the presence of TA in the anterior chamber, even in significant quantities, as evident in this case.

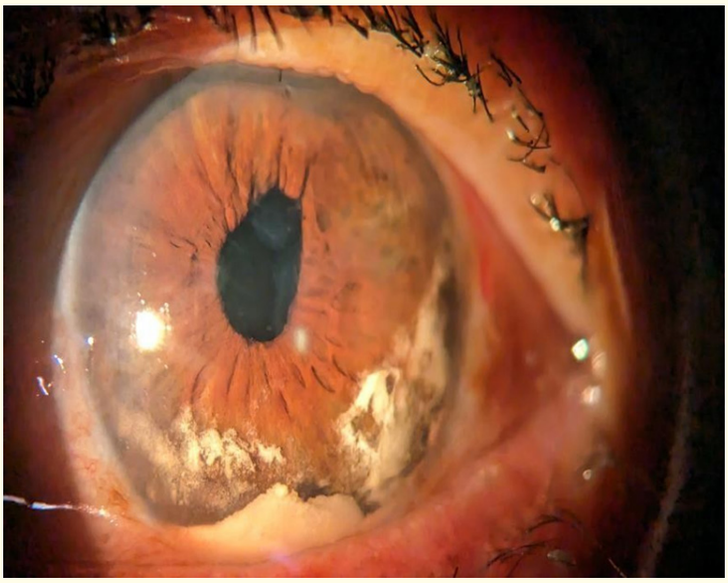

**Figure 1:** Triamcinilone crystals deposited inferiorly and nasally adherent to iris crypts are visible, Also superior peaking of pupil can be seen.

## Acknowledgement

The patient's consent for taking images and uploading them was obtained after appropriate counselling.

## Bibliography

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