RESIDENTSANDFELLOWS



THE PROBLEM WITH OIL

BY JAMES LIN, MD



I remember one day in clinic as a first-year resident when the nurse brought a patient's chart to me and said, "This young man has had severe pain in his right eye for the past day. Can you take a look at it, please?" I brought the patient over to the slit lamp and checked the IOP. It was 50 mm Hg. I

examined the eye and saw what seemed to be a meniscus of aqueous in the anterior chamber that gave the iris a shiny appearance. No corneal edema or anterior chamber inflammation was evident. I was perplexed. Why was the pressure so high when the eye itself looked quiet? There was even evidence of an inferior iridotomy. What was I missing?

My attending examined the patient, then turned to ask me if he had a history of retinal detachment. I glanced at



the medical record and confirmed my attending's suspicion. He asked if silicone oil had been placed in the eye. Again, I confirmed his suspicion. He leaned over and whispered, "Take a look at the iridotomy to see if it's open, and what material do you think is in the anterior chamber?" I took a look one more time, and then it hit me: the patient was in pupillary block from silicone oil that had pushed into the anterior chamber, and the iridotomy was closed!

After reopening the closed iridotomy with the YAG laser and relieving the patient's elevated IOP, I thought to myself how interesting the concept of silicone oil pupillary block was. I was struck by how many different ways glaucoma can develop and by how complex its etiologies can be.

This clinical experience inspired me to pursue research that has studied the effect of silicone oil removal on lowering IOP. Although a prophylactic peripheral surgical iridectomy is routinely made when silicone oil is used after retinal detachment repair, my research sought to determine which factors influence IOP after silicone oil is placed as well as after its subsequent removal.

As a resident, I have found it highly rewarding to manage a patient with a problem and to study why the problem occurred. Instances like these have demonstrated to me how a clinical experience can drive research to better explain disease. As I move forward in my career, I hope to be at the intersection between clinical care and research, providing the best care for patients.

Section Editor Albert S. Khouri, MD

- associate professor and program director of the ophthalmology residency as well as director of the Glaucoma Division at Rutgers New Jersey Medical School in Newark, New Jersey
- (973) 972-2045; albert.khouri@rutgers.edu

James Lin, MD

- third-year resident, Department of Ophthalmology, Columbia University, New York
- lin.jimmy@gmail.com