

Dry Eye Disease and Cataract Surgery

An Expert Interview with Cynthia Matossian

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Cynthia Matossian

Cynthia Matossian is the founder and medical director of Matossian Eye Associates, an integrated ophthalmology and optometry private practice with locations in New Jersey and Pennsylvania, US. She specializes in refractive cataract surgery including advanced technology implants for astigmatism and presbyopia correction. In addition, she focuses on dry eye disease, and has expertise in the latest diagnostic and treatment options to optimize the ocular surface.

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Ensuring the health of the ocular surface before moving a patient with cataracts to the operating room is essential in achieving an optimal surgical outcome. An impaired ocular surface has an impact on preoperative planning for cataract surgery.¹ Patients with cataracts with concomitant dry eye disease require special consideration to prevent worsening existing symptoms, as well as being properly informed of the risks of dry eye associated with cataract surgery.² Dry eye disease may also be a symptom of Sjögren's disease, a systemic autoimmune disease that initially targets primarily the lacrimal and salivary glands, but in its later stages can become systemic, potentially resulting in B cell lymphomas.³ In an expert interview, Cynthia Matossian discusses her recent research into both dry eye disease and cataract surgery, as well as sharing her highlights from some of this year's major ophthalmology conferences.

Q. Can you tell us about the latest research into testing for biomarkers for Sjögren's disease in patients with dry eye disease that does not improve with standard therapy?

Many patients who have dry eye disease could also have Sjögren's disease because the symptoms of Sjögren's disease vary. Patients might be reporting dental decay to their dentist, vaginal dryness to their gynaecologist and eye dryness to their ophthalmologist; no one is connecting the dots. For my patients who did not improve in the way I expected after implementing dry eye disease therapy, I started asking additional questions such as: "do you have a dry mouth or dry throat?" If the answer was yes, I ordered a test called the Sjö® test (Bausch + Lomb, Bridgewater, NJ, US) which includes three biomarkers for the early detection of Sjögren's disease. In the US, this test is commercially available and often covered by insurance. I was surprised to find that many of my patients with dry eye disease who were recalcitrant to treatment tested positive for these biomarkers. The moral of this story is: if, as ophthalmologists, we see patients with dry eye disease who are not improving as we had hoped, we should order the Sjö test to help make the diagnosis for these patients.

Q. What were your highlights from Hawaii Eye 2018?

This excellent meeting allowed ample time to mingle with faculty members and colleagues. There was a lot of emphasis on premium implants, treating patients for astigmatism, and cataract surgery to be viewed more as refractive lens-based surgery than basic cataract surgery.

Q. What were the key findings of the study you presented at the American Society of Cataract and Refractive Surgery (ASCRS) meeting 2018 entitled “Clinical and Economic Outcomes in Cataract Surgery Using Phenylephrine 1.0%–ketorolac 0.3% in a Real-world Setting”?

I gave a presentation on patients with cataracts treated with Omidria® (phenylephrine 1.0% and ketorolac 0.3% intraocular solution) (Omeros Corporation, Seattle, WA, US) in the standard irrigation solution during surgery.⁴ The number of patients was quite large: 635 eyes. Half of these patients did not receive Omidria, and these were compared to a group who had exactly the same surgical parameters but were given Omidria in the irrigation solution. The two co-end points were the use of

pupil-dilating devices and the surgical time. In the group in which Omidria was used, there was a statistically significant decrease of 67% in the use of pupil-dilating devices and a 7% decrease in surgical time compared to the non-Omidria group. Therefore the use of Omidria not only speeds up the case, but decreases the cost of cases because it decreases the use of pupil-dilating devices.

Q. What were your key highlights from ASCRS 2018?

There was an emphasis on dry eye disease, ocular surface disease, and meibomian gland dysfunction. Without optimizing the ocular surface it is difficult, if not impossible, to get premium outcomes with premium implants. Paying attention preoperatively will yield better data to put into our formulae and deliver better post-cataract surgical outcomes. The second area of interest was better diagnostics in order, not only to detect dry eye, but also to more accurately measure corneal topography, keratometry and biometry, getting through thicker and more dense cataracts, again for more accurate cataract surgery outcomes. The last area of interest is alternative drug delivery approaches for eye surgery to minimize eye drop burden and the cost of medication, and to consider intra-ocular drug delivery or possibly delivering medications through the puncta. □

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