Published in final edited form as:

Retina. 2015 December ; 35(12): e78–e79. doi:10.1097/IAE.0000000000000891.

Re: ‘Outbreak of endophthalmitis caused by multidrug resistant *Pseudomonas aeruginosa*’

Jayanth Sridhar, MD, Ajay E. Kuriyan, MD, Harry W. Flynn Jr., MD, and Darlene Miller, D.H.Sc.

Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL, USA

Keywords

endophthalmitis; pseudomonas; multidrug resistance

Letter to the Editor

We would like to thank Dr. Arora et al for their letter in response to our article, “Endophthalmitis caused by *Pseudomonas aeruginosa*: clinical features, antibiotic susceptibilities, and treatment outcomes”; RETINA: 35(6):1101-6.¹ We thank them for contributing their experience with a recent outbreak of *Pseudomonas aeruginosa* in North India.² It would be of interest to know if the cause of the outbreak was discovered given prior experience with similar outbreaks related to contaminated ophthalmic solutions.³⁻⁶ While thankfully in our series all organisms were sensitive to initially administered intravitreal therapy, managing multidrug resistant (MDR) *P. aeruginosa* is a challenge that is now real, rather than theoretical. Jindal et al previously administered intravitreal imipenem for MDR *P. aeruginosa*, and Arora et al have now demonstrated intravitreal piperacillin-tazobactam as an alternative.^{2,7} However, the poor outcomes in this latest outbreak unfortunately confirm that outcomes in these cases remain poor despite early and appropriate treatment.

Acknowledgments

This study is supported in part by NIH Center Core Grant P30EY014801, Research to Prevent Blindness Unrestricted Grant, Department of Defense (DOD- Grant#W81XWH-09-1-0675).

References

1. Sridhar J, Kuriyan AE, Flynn HW Jr, Miller D. Endophthalmitis caused by pseudomonas aeruginosa: clinical features, antibiotic susceptibilities, and treatment outcomes. Retina. 2015 Jun. 35:1101–6. [PubMed: 25658178]
2. Arora S, Arora P, Arora R, Ghosh B. Outbreak of endophthalmitis by multidrug resistant *Pseudomonas aeruginosa*. Retina. 2015 Epub ahead of print.

Corresponding to: Jayanth Sridhar, MD, 900 NW 17th Street, Miami, Florida, USA, Telephone: (305) 326-6000, Fax: (305) 326-6337, jsridhar119@gmail.com.

The authors have no proprietary or financial interest in any of the work discussed in this manuscript.

3. Swaddiwudhipong W, Tangkitchot T, Silarug N. An outbreak of *Pseudomonas aeruginosa* postoperative endophthalmitis caused by contaminated intraocular irrigating solution. *Trans R Soc Trop Med Hyg.* 1995; 89:288. [PubMed: 7660437]
4. Zaluski S, Clayman HM, Karsenti G, et al. *Pseudomonas aeruginosa* endophthalmitis caused by contamination of internal fluid pathways of a phacoemulsifier. *J Cataract Refract Surg.* 1999; 25(4): 540–5. [PubMed: 10198860]
5. Mateos I, Valencia R, Torres MJ, et al. Nosocomial outbreak of *Pseudomonas aeruginosa* endophthalmitis. *Infect Control Hosp Epidemiol.* 2006; 27:1249–51. [PubMed: 17080385]
6. Ramappa M, Majji AB, Murthy SI, et al. An outbreak of acute post-cataract surgery *Pseudomonas* sp. endophthalmitis caused by contaminated hydrophilic intraocular lens solution. *Ophthalmology.* 2012; 119(3):564–70. [PubMed: 22218145]
7. Jindal A, Pathengay A, Khera M, et al. Combined ceftazidime and amikacin resistance among Gram-negative isolates in acute-onset postoperative endophthalmitis: prevalence, antimicrobial susceptibilities, and visual acuity outcome. *J Ophthalmic Inflamm Infect.* 2013; 3(1):62. [PubMed: 24161048]