

It is interesting to speculate on the etiopathogenesis of insidious ocular inflammation due to *P. aeruginosa*. Chronic postsurgery endophthalmitis due to low virulent strains including *Pseudomonas oryzihabitans*, *Pseudomonas stutzeri*, and *Pseudomonas luteola* has been reported.^[1,3] It is possible that environmental factors such as locus of infection and use of aggressive antibiotics delay the presentation and reduce the severity of infection/inflammation. Once *Pseudomonas* gains access into sub-tenon space or vitreous cavity, antibiotics may not reach in adequate concentration. Thus, *Pseudomonas* rather than being eradicated may persist. *P. aeruginosa* strain PAO1 possesses a number of genes those are involved in regulation, catabolism, transport, and efflux of organic compounds as well as several putative chemotaxis systems. All of these genes enable *P. aeruginosa* to adapt to a wide range of environmental adversities. In addition, probably the capability of *Pseudomonas* to grow within biofilms protects them from adverse environmental factors and may be the major reason for persistence.^[4] Relative lack of oxygen in the sub-tenon's space and vitreous cavity may contribute to biofilm formation and persistence of infection.^[5] Oxygen limitation has been reported to increase robust biofilms, alginate biosynthesis, and antibiotic tolerance, which contributes to persistence of *P. aeruginosa*. Molecular mechanisms responsible for the switch from planktonic growth to a biofilm phenotype have also been elucidated.^[4] Once antibiotic is discontinued or if steroid is used, the infection becomes fulminant and the diagnosis becomes evident.

Nagaraj and Jayadev treated their patient with intravitreal ciprofloxacin, as the organism was sensitive to ciprofloxacin. We feel that in the recent years ciprofloxacin resistance to *Pseudomonas* has greatly increased and alternative better drugs may be considered.

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***Pseudomonas aeruginosa* endophthalmitis masquerading as chronic uveitis**

We read the article titled, "*Pseudomonas aeruginosa* endophthalmitis masquerading as chronic uveitis" by Nagaraj and Jayadev with great interest.^[1] In general, *Pseudomonas* endophthalmitis presents as an acute and fulminant infection. Chronic low-grade infection due to *Pseudomonas* is extremely rare. We had reported a case of *P. aeruginosa* multiple scleral abscesses and recurrent endophthalmitis occurring 8 months after uneventful cataract surgery.^[2] We wish to discuss some issues on this unusual variant of *Pseudomonas* ocular infection.

References

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