

At Issue: Cataract surgery prophylaxis regimen



At Issue posed the following question to a panel of experts: "What is your preferred prophylactic regimen for cataract surgery?"



Reduce bacterial load

Noel A. Alpins, FRACO, FRCOphth, FACS: The underlying goal of prophylactic antibiotic treatment in cataract surgery is to reduce the bacterial load of organisms in the periocular environment.

This process begins at the initial consultation when any existing blepharitis is identified and treated and continues until the patient is seen 1 hour prior to the small-incision cataract surgery. At this stage, the lids are cleaned of any debris, and a drop of chloramphenicol 0.5% is instilled after the mydriatic.

Immediately before the surgery, the surrounding skin of the eye is further cleansed with povidine-iodine 10%, with a little of this allowed to trickle into the cul-de-sac. Eyelids and lashes are then draped with plastic, leaving only the ocular surface exposed. The irrigating solution used both intraocularly and to moisten the cornea throughout the surgery is primed with gentamicin (4 mg in 500 mL) to reduce the risk of endophthalmitis.

At the conclusion of surgery, a fluorescein Seidel test is performed to ensure the wound is adequately closed. If not, then stromal hydration or occasionally a suture may be required. Postoperatively, the patient

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is on a regimen of chloramphenicol 0.5% four times a day for the first week in addition to topical corticosteroids.

It has not been necessary to modify the regimen for antibiotic prophylaxis for cataract surgery in recent times. There is only a small incidence of infection associated with small-incision cataract surgery, and no cases of endophthalmitis have occurred in the past 3,000 cases. Assessing the risk factors preoperatively and the systematic approach of reducing the bacterial load at each step of the procedure allow the surgery to be performed under the optimal conditions and with minimal risk of infection. **OSN**