

Levofloxacin should be the first choice for antibacterial prophylaxis

September 12, 2006

Levofloxacin 0.5% eye drops should be the first choice for antibacterial prophylaxis and treatment, according to Professor P. Asbell of the Mount Sinai School of Medicine, USA.

Professor Asbell, speaking at the Santen lunchtime symposium, reported on a multicentre study aimed at determining the prevalence of resistance among isolates of various bacterial pathogens against antibiotics obtained from patients with eye infections in Germany.

The study was conducted at 35 sites and collected a total of 1,470 ocular isolates between June and November of 2004. Bacteria were identified and EUCAST break points (susceptible - intermediate - resistant) were applied where available. Susceptibility against eight approved antibiotics, with oxacillin as standard, were examined: levofloxacin, ofloxacin, ciprofloxacin, kanamycin, chloramphenicol, erythromycin, colistin and gentamicin.

The results showed that levofloxacin and chloramphenicol provided the best resistance against streptococcus viridans, gentamicin and erythromycin were most resistant to haemophilus influenzae and that levofloxacin and ciprofloxacin were the first choice against pseudomonas aeruginosa.

The results suggest that levofloxacin offers the broadest spectrum of activity against ocular infections. Furthermore, in a separate study in the USA TRUST (Tracking Resistance in the USA Today), the antibiotic maintained this spectrum over a nine year period. The antibiotic is a third generation quinolone that is highly active against ocular pathogens. It is hydrophilic and lipophilic and penetrates well into the anterior chamber.

Professor Asbell concluded that levofloxacin offers the best resistance profile and should be a first choice for antibacterial prophylaxis and treatment.

Ophthalmology Times Europe reporting from the XXIV Congress of the ESCRS, London, 9-13 September, 2006.