

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Service (sector) Laboratory - External diseaseN° CEP

Ciprofloxacin and levofloxacin resistance among methicillin-sensitive Staphylococcus aureus isolates from keratitis and conjunctivitis. Marangon FB, Miller D, Muallem MS, Romano AC, Alfonso EC

PURPOSE: The majority of Staphylococcus aureus isolated from ocular infections are methicillin sensitive (MSSA). Fluoroquinolone resistance among methicillin-resistant Staphylococcus aureus is well known but not among MSSA. In this study we investigate the emergence of fluoroquinolone (ciprofloxacin, levofloxacin) resistance among methicillin-sensitive Staphylococcus aureus isolates from keratitis and conjunctivitis. **DESIGN:** Cross-sectional study. **METHODS:** Minimal inhibitory concentration susceptibility profiles for 1230 S. aureus isolates from keratitis and conjunctivitis were analyzed. Historical and current rates of emerging fluoroquinolone resistance for methicillin-resistant (MRSA) and methicillin-sensitive isolates (MSSA) were evaluated. Sensitivity patterns for vancomycin and gentamicin were also documented. **RESULTS:** Ciprofloxacin resistance among corneal and conjunctival S. aureus isolates during the first 6 years after its introduction (baseline) (1990-1995) was 8% and ranged from 3% to 11%. The rate for the most recent 6 years (current) (1996-2001) was 20.7%. Baseline ciprofloxacin resistance for MSSA isolates was 2% vs 55.8% for MRSA. The current resistance rate for MSSA is 5% vs 83.7% for MRSA. The general resistance rate from January 2000 to December 2001 for levofloxacin was 25.5% vs 33.2% for ciprofloxacin (P =.13). The levofloxacin-resistance rate for MSSA was 4.7% vs 11.9% for ciprofloxacin (P =.05). In MRSA isolates, a higher resistance rate was found for ciprofloxacin (95.7%) vs levofloxacin (82.1%) (P =.04). No resistance for vancomycin was documented for any of the S. aureus isolates. Gentamicin susceptibility for MSSA was 99% and MRSA was 86%. **CONCLUSIONS:** Ciprofloxacin and levofloxacin resistance among methicillin-sensitive S. aureus corneal and conjunctival isolates is increasing. This is of concern because it narrows treatment choices for the management of these common ocular infections.