



## Bacteriología Nosocomial I

**"Novedades en Microbiología Clínica"**

**M<sup>a</sup> Isabel Sánchez Romero**

**Hospital Universitario Puerta de Hierro Majadahonda**

## Therapeutic options for *Stenotrophomonas maltophilia* infections beyond co-trimoxazole: a systematic review

Matthew E. Falagas<sup>1–3\*</sup>, Politimi-Elcni Valkimadi<sup>1</sup>, Yu-Tsung Huang<sup>4,5</sup>,  
Dimitrios K. Matthaiou<sup>1</sup> and Po-Ren Hsueh<sup>4,5</sup>

<sup>1</sup>Alfa Institute of Biomedical Sciences (AIBS), Athens, Greece; <sup>2</sup>Department of Medicine, Tufts University School of Medicine, Boston, MA, USA; <sup>3</sup>Department of Medicine, Henry Dunant Hospital, Athens, Greece; <sup>4</sup>Department of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan; <sup>5</sup>Department of Laboratory Medicine, National Taiwan University Hospital, Taipei, Taiwan

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**Background:** *Stenotrophomonas maltophilia* has emerged as an important opportunistic pathogen, causing infections whose management is often problematic due to its inherent resistance to many antibiotics, making co-trimoxazole the main therapeutic option. However, there are cases in which either due to antimicrobial resistance or allergic reactions and intolerance to co-trimoxazole this antibiotic cannot be administered. We sought to evaluate the available clinical evidence regarding potentially effective alternative antibiotics for the treatment of *S. maltophilia* infections.

**Methods:** The literature search was performed in the PubMed and Scopus databases. The search string used was '*Stenotrophomonas maltophilia* OR *Xanthomonas maltophilia*'.

**Results:** Thirty-one case reports and 5 case series were retrieved including a total of 49 patients with a variety of infections. Twenty of 49 cases (40.8%) were treated with ciprofloxacin as monotherapy or in combination with other antibiotics; 12 of 49 cases (24.5%) were treated with ceftriaxone- or ceftazidime-based regimens; and 6 of 49 cases (12.2%) were treated with ticarcillin- or ticarcillin/clavulanate-based regimens. The cure or improvement rates were 18 cases (90%), 8 (75%) and 4 (66.7%), respectively. The remaining 11 patients received various antimicrobials including aminoglycoside-based regimens, carbapenems, levofloxacin, chloramphenicol, aztreonam, minocycline and other  $\beta$ -lactams.

**Conclusions:** The limited available data suggest that ciprofloxacin, ceftazidime or ceftriaxone, and ticarcillin/clavulanate, alone or in combination with other antibiotics, may be considered as alternative options beyond co-trimoxazole.

Keywords: ciprofloxacin, ceftazidime, ceftriaxone, antimicrobial resistance, ticarcillin/clavulanate, *Xanthomonas*, *Pseudomonas*

# *S. maltophilia*: opciones de tratamiento

## Datos del estudio



- Pubmed y Scopes
- Revisores independientes y adicionales
- Excluyeron 2077 estudios
- Se seleccionaron 34 para estudios posteriores
- El número total de casos fue 49
- Los pacientes se seleccionaron en 4 grupos según antibiótico utilizado

# *S. maltophilia*: opciones de tratamiento

## Datos de selección

- Pacientes infectados con *S. maltophilia*
- Pauta de tratamiento con algún antibiótico sensible según antibiograma
- Se excluyeron los pacientes tratados con cotrimoxazol
- Todos recibieron terapia sistémica
- Se evaluó el resultado de la infección



## *S. maltophilia*: Número de casos

- 20 ciprofloxacino +  
– caz, caz + gm, ak, tic-cla, pip, nn, clo
- 12 ceftriaxona/ceftazidima +  
– amp, ak, nn, cip, net
- 6 ticarcilina-clavulánico +  
– nn, ak, tei
- 11 Varios

85%

50%

60%

## *S. maltophilia*: opciones de tratamiento

- Tratamiento de elección : cotrimoxazol
- Alternativas: ticarcilina-clavulánico, ciprofloxacino y ceftazidima/ceftriaxona
- Combinaciones
  - Cotrimoxazol, rifampicina y carbenicilina
  - Cotrimoxazol, ticacilina-clavulánico y cefalosporinas de 3G

Desensibilización al cotrimoxazol

## *S. maltophilia*: opciones de tratamiento

- Interpretación cuidadosa de los resultados favorables en neumonía y bacteriemia
- Colonizador o patógeno
- Patrones de sensibilidad local
- Tratamientos combinados para disminuir la posibilidad de hacer las cepas más resistentes

# *S. maltophilia*: conclusiones



Valoración de nuevas moléculas de antimicrobianos

Guías de consenso