

Estudio número 10

Hipoacusia neurosensorial asociada a macrólidos. Revisión sistemática.

Los autores realizaron una búsqueda sistemática para identificar artículos en los que se describen el tratamiento con antibióticos macrólidos e hipoacusia neurosensorial documentada. Se tuvieron en cuenta los distintos tipos de macrólidos, las dosis empleadas, la duración del tratamiento, así como la severidad de la hipoacusia, el momento de aparición, la reversibilidad de la sordera tras el abandono del tratamiento o con medicación adicional. Con los mencionados criterios de inclusión se seleccionaron 44 publicaciones (3 prospectivas y 41 retrospectivas), que en total describen 78 casos de hipoacusia confirmadas mediante audiometría. La hipoacusia neurosensorial aparece tanto en pacientes tratados con macrólidos orales como intravenosos, a dosis estándar o elevadas. La hipoacusia neurosensorial fue irreversible en 6 casos, pese a la suspensión del antibiótico y/o el tratamiento con corticoides.

Las hipoacusias aparecieron dos a tres días después de la exposición y fueron reversibles simplemente suspendiendo el tratamiento en 70 casos. En nueve estudios se describen hipoacusias subjetivas.

El tratamiento con antibióticos macrólidos puede generar hipoacusias neurosensoriales, incluso en dosis normales y por vía oral. No están muy claros los mecanismos biológicos, de su ototoxicidad.

Macrolide-associated sensorineural hearing loss: A systematic review.

Objective

To investigate the potential association of macrolide antibiotics with sensorineural hearing loss (SNHL) and which agents and dosage may be related. To evaluate whether an optimal treatment exists for reversing SNHL that occurs after macrolide therapy.

Study design

Systematic review of the literature.

Methods

Computerized (PubMed, EMBASE, Cochrane Library) and manual searches were performed to identify human studies of all ages (patients) who received macrolides (intervention, with or without control) and documented SNHL (outcome). All study designs were assessed. Extracted data included macrolide regimen details, as well as the timing, severity, and reversibility of SNHL with drug cessation alone or with additional medical intervention. Study designs and the associated risk of bias were assessed.

Results

The 44 publications (3 prospective, 41 retrospective) that met these criteria described 78 cases of audiometrically confirmed SNHL. SNHL was associated with oral and intravenous macrolide administration at standard and elevated doses. SNHL was irreversible

in six cases, despite macrolide cessation ($n = 5$) and oral steroid treatment ($n = 1$). Irreversible SNHL was observed following 2 to 3 days of exposure. SNHL was reversible with macrolide cessation alone in 70 cases. In two cases, macrolide cessation coupled with oral steroid administration restored hearing. Reversible cases improved within hours to days. Nine studies also described 42 cases of subjective patient-reported hearing loss. Limitations in the data arose from study design, related comorbidities, and concomitant drug administration.

Conclusion

SNHL may follow macrolide exposure, even at standard oral doses. Further research is needed to understand the incidence, prevalence, and biological mechanism of its ototoxicity. Laryngoscope, 2017.

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Keywords

Sensorineural hearing loss; antibiotic adverse effects; macrolides; ototoxicity; systematic review

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