

Abstract

Background: Chronic suppurative otitis media (CSOM) is an important cause of hearing loss in children and constitutes a serious health problem globally with a strong association to resource-limited living conditions. Topical antibiotics combined with aural toilet is the first-hand treatment for CSOM but antimicrobial resistance and limited availability to antibiotics are obstacles in some areas. The aim of this study was to investigate the effect of topical treatment with an antiseptic solution and with a specially designed pipette.

Methods: A bellows pipette was designed to enable suction and rinsing of the ear canal. A 2% vinegar was used as an antiseptic. The pipette was first used to aspirate discharge from the ear canal. A separate pipette was thereafter used to rinse the ear with vinegar, which was flushed into the canal. The procedure was repeated 2-4 times daily until the discharge ceased.

Results: Fifty-six patients were included in the study. The duration of discharge was from one month to 40 years. The median age was 13,5 range 1-62 years. Follow up was possible in 48 patients and in 39 patients the treatment resulted in a dry ear within 10 days of treatment.

Conclusions: Local treatment of ears with chronic infection of the type suppurative otitis media (CSOM) with 2% vinegar and a specially designed pipette proved to be an effective method to end the ear discharge. Whether the effect is permanent, we have not shown. Further research is needed to assess whether the use of the pipette (EarClean) and vinegar, if implemented in primary health care, could reduce the incidence of severe complications from chronic ear infections.

Keywords: Chronic suppurative otitis media, topical treatment, a bellows pipette, acetic acid 2%