A STUDY OF PSEUDOMONAS INFECTION OF THE EAR

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Abstract

Of 142 patients with pseudomonas aeruginosa (PSA) ear infections, 88 (62 per cent) had chronic otitis media and 54 (38 per cent) external otitis. Following serotyping and pyocin typing of their bacteria, and relating the type to outcome, patients could be divided into three groups: (1) 120 patients who had no recurrence with isolation of only one PSA strain. (2) 13 patients who had recurrent infections and in whom the same PSA strain was isolated in repeated cultures, and (3) nine patients with recurrent disease, but who had a change in their PSA strains. Most of the PSA strains isolated from patients in groups (1) and (2) were stable to pyocin, and resistent to gentamicin.

Patients in the 1rst group were all cured initially by medical management. Of the nine patients in group (3) who had a different serotype on repeated cultures, medical treatment was successful in eight (89 per cent) but of the 13 patients in group (2) who had the same pseudomonas aeruginosa serotype cultured, medical therapy failed in six (46 per cent) and mastoid surgery was required. Serotyping of pseudomonas aeruginosa otitis may be helpful in predicting the type of management in patients who have recurrent infections.

Introduction

Pseudomonas aeruginosa was first isolated from a clinical infection in 1882 (Gessard). By the end of the 19th century it had been cultured from nearly every anatomical site of infection. Although the use of new antibiotics has become wide spread, Pseudomonas aeruginosa infections are still a