A-09: Antibiotic resistance in clinical isolates of *Salmonella typhi*

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Objectives of the study were to determine: (a) the extent of chloramphenicol resistance among clinical isolates of *S. typhi*; (b) the antibiotic resistance patterns of chemical isolates of S. typhi Blood (345), stool (126) and urine (287) cultures were carried out in 345 patients with a clinical diagnosis of typhoid. Isolation/identification of *S. typhi* was done using standard methods.

Antibiotic sensitivity tests to chloramphenicol, ampicillin, cotrimoxazole, mecillinam and ciprofloxacin were done using the Stokes disc diffusion methods (control: *E. coli* NCTC 10418).

S. typhi was isolated from 38 (11%) of blood cultures. Chloramphenicol resistance was detected in 15 (28%) of 56 isolates from blood, stool and urine with 6 additional strains showing intermediate sensitivity. Ampicillin, cotrimoxazole, mecillinam and ciprofloxacin resistance was detected in 17 (30%), 30 (54%), 16 (29%) and 6 (11%) respectively. 10 Chloramphenicol resistant resistant strains were resistant to 3 antibiotics tested.

Although clinical suspicion is that chloramphenicol resistant *S. typhi* occurs and 1 such case has been documented, this is the first report of the problem in a Sri Lankan setting. Resistance of 28% of isolates to chloramphenicol suggests that inappropriate prescribing may occur, as facilities for isolation/ABST of S. typhi are not routinely available or utilised. The emergence of ciprofloxacin resistance within 2 years of use of this drug is also disquieting. A review of the management of typhoid seems timely.

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