FREQUENCY OF TRANSFERABLE ANTIBIOTIC RESISTANCE AMONG ENTERIC BACTERIA IN ISOLATES FROM HOSPITAL PATIENTS

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Due to the limited facilities available for bacteriological testing the use of antibiotics in Sri Lanka is not well controlled. This has lead to the selection spread of antibiotic resistant bacteria In a series of hospital specimens it was found that of 400 isolated enteric bacteria, 81% and 63% were resistant to ampicillin and tetracycline respectively. A frequent common resistance exhibited by these organisms was that of resistance to Ampicillin, Sulphamethxazole, Tetracycline, Trmiethoprim, Erythromycin, Nitrofurantion and Chloramphenicol. Drug resistance is in many cases transferable among different species of enteric bacteria (1). The total frequency of transferable resistance was found to be 26% and the most common pattern of transferable resistance was to Ampicillin, Tetracycline, Sulphamethoxazole and Chloramphenicol.

A general conclusion could be that the main cause for the frequent appearance of resistance in bacteria is the liberal use of antibiotics, and also the transfer of resistance by R-plasmids among members of the bacterial populations.

Reference:

1. Harada, K. K. M. Suzuki, M. Kameda and S. Mitsuhashi 1960. J. Exptl. Med. 30; 289-299.

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