To the Editors:

***Salmonella typhi* and chloramphenicol resistance**

Ceylon Medical Journal, 2000; **45**: 136-137

Typhoid fever is a systemic bacteraemic infection with gastrointestinal portal of entry and important intestinal and systemic complications. It is caused by *Salmonella typhi*.

Chloramphenicol has been the treatment of choice for typhoid fever since its introduction in 1948 (1). It remains the standard drug with which the other agents are compared (2). But recently attention has been focused in

treatment with other drugs due to the emergence of multidrug resistant isolates.

The following table shows the antibiotic resistance pattern of *Salmonella typhi* isolated from blood, clot and stool cultures for the years 1998 and 1999, performed in the department of bacteriology, Medical Research Institute, Colombo.

Table. Antibiotic sensitivity of *Salmonella typhi* in 1998 and 1999.

Year	Number of tests	% Resistant					
		Chlor	Cipro	Ceftri	Fura	Amp	Cotrim
1998	72	31	0	0	6	28	39
1999	77	27	0	0	3	35	36

Chlor - chloramphenicol, Cipro - ciprofloxacin, Ceftri - ceftriazone, Fura - furazolidone, Amp - ampicillin, Cotrim - cotrimoxazole

Of chloramphenicol resistant strains, 93% were resistant to ampicillin, and all were resistant to cotrimoxazole. These multiresistant *S. typhi* are currently causing problems in India, Pakistan and Bangladesh (3). All chloramphenicol resistant strains were sensitive to ciprofloxacin and ceftriazone. Majority of multidrug resistant strains were sensitive to furazolidone as well. Therefore, though chloramphenicol remains as the agent of first choice in typhoid fever when the organism is susceptible, fluoroquinolone, cephalosporin or furazolidone are now frequently indicated because of problems of drug resistance.

References

1. Miller SI, Hohmann EL, Pegues DA. *Salmonella*. In: Mandell

GL, Benett JE, Dolin R; eds. Principles and practice of infectious diseases. 4th ed. London: Churchill Livingstone, 1995: 2013-26.

2. Kelly P, Farthing MTG. Infections of the gastrointestinal tract. In: O'Grady F, Finch RG, Lambert HP, Greenwood D, eds. Antibiotic and chemotherapy. 7th ed. London: Churchill Livingstone, 1997: 711-2.

3. Richens J. Typhoid and paratyphoid fevers. In: Weatherall DJ, Ledingham JGG, Warrell DA, eds. Oxford Textbook of Medicine. 3rd ed. vol 1. Oxford: Oxford University Press 1996: 560-7.

G K D Karunaratne, R S B Wickremesinghe and K C R Perera, Department of Microbiology, Medical Research Institute, Colombo.