Table 1. Sensitivities of the commonest urinary pathogens.

Organisms	Number of significant growths (percentages)	Percentage of organisms sensitive to each drug						
		Ampicillin	Cotrimoxazole	Trimethoprim	Nalidixic acid	Cinoxacin	Nitrofurantoin	Mecillinam
Esch. coli	138 *(69)*	*66.6*	*95.6*	*95.6*	*97.8*	*97.8*	*87.6*	*94.9*
Proteus spp.	22 *(11)*	*95.4*	*100*	*100*	*95.4*	*81.8*	*0*	*72.7*
Klebsiella spp.	15 *(7.5)*	*0*	*86.6*	*86.6*	*93.3*	*93.3*	*73.3*	*73.3*
Strep. faecalis	9 *(4.5)*	*100*	*0*	*0*	*0*	*0*	*44.4*	*0*
Others*	16 *(8)*							
All urinary pathogens	200	*62*	*87*	*87*	*86*	*84*	*69*	*79*

*Included *Pseudomonas spp., Staph. aureus, Staph. albus* and unidentified coliforms.

COMPARATIVE ACTIVITIES OF SOME OLDER AND NEWER DRUGS AGAINST URINARY PATHOGENS

Sir,

Towards the end of 1979, a special study was undertaken to determine sensitivities of all clinically significant organisms to various antibiotics in use in this hospital and to some newly introduced ones. As a part of that study, 200 consecutively isolated urinary pathogens were tested against ampicillin, cotrimoxazole, trimethoprim, nalidixic acid, cinoxacin, nitrofurantoin, and mecillinam by the routine disc-diffusion tests. The results are shown in Table 1.

More than one third of all urinary pathogens in this study were found to be resistant to ampicillin. In terms of percentage sensitivities, best activities were seen in cotrimoxazole, trimethoprim, nalidixic acid, and cinoxacin; these were closely followed by mecillinam. When drugs show similar antibacterial and pharmacological activities, one should be guided by the costs and reported clinical success. Cotrimoxazole and nalidixic acid have been in use with satisfactory results for a long time. Trimethoprim, which is a component of cotrimoxazole, has recently been introduced in Britain as a single drug for prescription. Table 1 shows that there was no difference between the antibacterial activities of cotrimoxazole and trimethoprim, a result well supported by clinical trials (Kasanen *et al.*, 1979; Huovinen and Toivanen, 1980).

Side-effects were less common after trimethoprim use and emergence of bacterial resistance after its use was similar to that seen after cotrimoxazole (Huovinen and Toivanen, 1980). Trimethoprim is cheaper than cotrimoxazole. Mecillinam would work very well in urinary tract infection, but it is unlikely to be much better than some other drugs (Damsgaard, *et al.*, 1979). The results of this study would support this fact. Mecillinam is also costlier than the others just mentioned; it would be better not to use it routinely but to keep it in reserve for special cases, for instance, where there is drug resistance or when other drugs are contraindicated. Cinoxacin is a newly introduced drug, similar chemically and in its antibacterial spectrum to nalidixic acid (Mardh *et al.*, 1977). This study shows that more strains of *Proteus spp.* were likely to be resistant to cinoxacin than to nalidixic acid. The latter is cheaper, but cinoxacin is known to have better pharmacokinetic properties (Mardh *et al.*, 1977). Whether this property would justify the use of cinoxacin in preference to nalidixic acid could be known only after controlled therapeutic trials.

Comparative costs of various drugs were kindly supplied by the pharmacy of this hospital and were also verified from the *Monthly Index of Medical Specialities (MIMS).*

M. RAHMAN
Consultant Microbiologist
King's Mill Hospital
Sutton-in-Ashfield
Nottinghamshire.

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DOMICILIARY CARE

Sir,

As Lecturer for the Diploma in Nursing, and Medical Secretary and Receptionist to students at this College, I have become a regular and interested reader of the *Journal.*

It was with special interest and admiration that I read the report by Keighly and MacGregor (June *Journal,* p. 354). Total parenteral nutrition is attended by hazards of infection and biochemical imbalance when undertaken in hospital. To initiate this procedure in the home is a great step towards home medical care.

I was, therefore, disappointed to read that it had been decided not to gain the assistance of community nursing sisters. Surely a trained nurse skilled in aseptic and antiseptic procedures would be of assitance in preventing infection—rather than, as suggested in the article, that her/his absence is a source almost of self-congratulation. On the author's own admission, the patient's wife was under great stress and the support and help of a qualified nurse might have eased the burden. As well as this, a professional nurse brings special skills of caring which could have been of comfort to the patient and relieved the medical team of some of their concern.

The *Journal,* Sir, through its articles, repeatedly subscribes to the concept of a health care team, and in this circumstance that concept seems to be particularly necessary.

My comments are in no way intended to detract from what is a useful article about innovation in home care of seriously ill patients and family.

HAZEL LEONARD
Course Tutor, Farnborough College of Technology
Boundary Road
Farnborough
Hampshire
GU14 6SB.