Quinolones and fluoroquinolones are useless to counter uropathogenic *Escherichia coli* infections [Letter]

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Bhoj R Singh

Division of Epidemiology, The Indian Council of Agricultural Research-Indian Veterinary Research Institute, Izatnagar, 243122. India In the study by Malekzadegan et al, 1 conducted on a limited number of cases, it is reported that 71.9% and 48.4% of isolates of uropathogenic Escherichia coli were resistant to nalidixic acid and ciprofloxacin, respectively. It appears of normal occurrence but certainly enriches the knowledge of clinicians towards the selection of appropriate antibiotic. In the study, E. coli isolates claimed to be uropathogenic were not confirmed for their uropathogenic potential with any other test than their isolation in pure culture from urinary tract infection (UTI) cases. Uropathogenic E. coli may also occur in mixed culture and sometimes may be just contaminants from perineal region.² My intention is not to criticise the report but I feel that people in Iran are certainly lucky not to have super-drug-resistant E. coli causing urinary tract infections. In Bareilly, one of the big city in India, on looking at bacteriological culture and antibiotic sensitivity data of recent 209 human UTI cases referred to Clinical Epidemiology Laboratory of the Institute, E. coli was at the top to be associated with urinary tract infections in 22% cases, followed staphylococci (20.6%), streptococci (10.5%), enterococci (8.1%), Enterobacter sp. (6.2%), Proteus sp. (4.3%), Aerococcus sp. (3.8%), Erwinia sp. (3.8%), klebsiellae (3.3%), pseodomonads (2.9%), Raoultella sp. (2.9%), Acinetobacter sp. (1.9%), Alcaligenes sp. (1.9%), aeromonads (1.4%), Flavobacter sp. (1%), Micrococcus sp. (1%) strains, and isolation of Actinobacillus, Bacillus, Candia, Citrobacter, Edwardsiella, Moraxella, Morganella, Serratia and Vibrio species from one case each was also recorded.

Of the 46 isolates of *E. coli*, isolated in our laboratory from UTI cases, all were resistant to nalidixic acid, only 13% were sensitive for ciprofloxacin and 7 of them were also resistant to one or more carbapenem drugs (producing Metallo- β -lactamase); however, nitrofurantoin, a drug of choice earlier in UTI cases, was found inhibitory to >90% strains of *E. coli* from UTI cases.

I feel that there is a continuous need for monitoring of *E. coli* and other bacteria too causing UTI and gastrointestinal tract infections to keep an eye on the emergence of drug-resistant strains as such *E. coli* strains have a high potential of spread beyond geographical boundaries through excretions of travellers either clinically ill or carriers of the potentially pathogenic strains.

Correspondence: Bhoj R Singh 438 MLB, Division of Epidemiology, ICAR-Indian Veterinary Research Institute, Izatnagar 243122, India Email brs1762@gmail.com

Disclosure

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