

intravenously has maximum effect at 10-30 minutes and lasts one-2 hours. Intramuscular insulin is a good alternative if the patient is not hypotensive. Knowledge, understanding and skills of paramedical staff should never be taken lightly.<sup>4</sup>

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### References

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### Urinary tract infection

Sir,

I read with interest Dr. Akbar's study on urinary tract infection (UTI) in hospital, particularly in medical patients. This simple, elegant and factual study provides useful information to clinicians in practice both in Kingdom of Saudi Arabia and elsewhere. I have only some comments that represent a wish list. I hope available data to the author might allow further comments that would make his study most comprehensive and valuable. Identifying and segregating patients who present with acute UTI from those with recurrent chronic infections is important with regards to the underlying cause of UTI and the choice of antibiotic therapy. I agree that aminoglycoside and ciprofloxacin are the first choice in treating acute UTI, but I am not so sure if it should be used in recurrent UTI of both diabetics and

nondiabetics. It is unfortunate that drugs such as Nalidexic acid and Macrofantines were not included in the list of drugs used in susceptibilities of organisms isolated from urine. These drugs may be cheap and old but my experience suggest that it continues to work in chronic UTI when other drugs fail. Including the result of urine analysis in the study, particularly the white cell count or pyuria, and contrasting it with the result of urinary culture would answer an important question: should the incidence of UTI include patients with positive cultures only, or should it extend to include those with abnormal pus cells in urine analysis as well? There is a group of patients who present with pyuria and symptoms of UTI but have negative bacterial cultures. One always wonders if this is due to false negative cultures, particularly when the urine samples were taken before the start of antibiotic therapy, while specific infections such as tuberculosis and brucellosis were excluded. The author reported that: "Out of a total of 7154 urine cultures, 763 (11%) showed significant bacteruria, 182 (32%) were from the medical unit." Does the total number of cultures, belong to the whole hospital (both out-patients and in-patients) or in-patients only? The incidence is in fact 2.5% of all UTI patients. One thought the overall incidence of UTI in referred hospital patients was around 20%, would the difference be related to the above-mentioned method of diagnosis of UTI?

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### Reply from the Author

Author declined to reply.

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