Comment on: Urinary tract infection in hospitalized elderly patients in the United Kingdom: the importance of making an accurate diagnosis in the post broad-spectrum antibiotic era

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Keywords: infection, UTIs, antibiotic policy

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Sir,

The paper by Gopal Rao and Patel1 is an important addition to the best management of urinary tract infections (UTIs) in hospitalized elderly patients, and the authors should be congratulated for highlighting the importance of a more focused antibiotic approach.

As a practicing clinician, however, I believe that their paper does not emphasize sufficiently what to do in the presence of microbiologically positive urine without accompanying clinical features (asymptomatic bacteriuria), a condition whose prevalence increases with advancing age in both sexes, up to 40% and 50%, respectively, among asymptomatic institutionalized elderly men and women.2

While it is a fact that the cardinal features of a UTI (fever, abdominal and/or back pain, frequent and painful urination) may sometimes be difficult to elicit in older people, bacteriuria is too often invoked as a spurious explanation for many non-specific symptoms in this population.3

Due to the high pre-test probability of a positive culture, it is important that the limits of both urine dipstick and urine culture in this setting be highlighted. Gopal Rao and Patel1 report that reliability of the dual absence of nitrites and leucocyte esterase may reach over 90% in ruling out UTI, but other studies suggest that the test has an acceptable rate of detection/exclusion only when used in combination with other tests.4 The authors also acknowledge the difficulties in obtaining a clean catch specimen from demented or incontinent patients, which have led to previous negative comments on the practical value of urine culture in the elderly.5 Gopal Rao and Patel1 advocate an ‘in–out’ catheterization: while this may most likely improve the pre-analytical variability of the test, it still fails to address the issue of coincidentally infected urine and may add to the logistical complexity imposed by a rising number of acute admissions, particularly if a bladder ultrasound scanner was required, as the authors suggest.

On a final note, it must be remembered that while there is no evidence that either sex benefits from treatment in the absence of symptoms,6,7 there are several indications that excessive antibiotic use may select and maintain antibiotic resistance and may play a role in the increasing number of hospital-acquired infections.8,9

I believe that the diligent detection of specific symptoms and signs remains an essential preliminary to the correct interpretation of microbiological results and decisions to treat, and that the use of antibiotics in their absence should be discouraged, particularly in this post broad-spectrum antibiotic era.10

Transparency declarations

None to declare.

References


Letters to the Editor

Sir,
We welcome Dr Baglioni’s comments on our paper, reiterating the importance of a more focused antibiotic approach. We agree with his observations that asymptomatic bacteriuria is a common clinical dilemma that is often invoked as a spurious explanation for other non-specific symptoms leading to often unnecessary treatment in this population.

One pragmatic solution to this dilemma may possibly be being more judicious about requesting the relevant investigation in the first place (for example, in this case, a urinary specimen), thereby avoiding the situation of asymptomatic bacteriuria. Indiscriminate screening tests should be discouraged as much as the indiscriminate use of broad-spectrum antibiotics.

With reference to the observation made about the negative predictive value of the dipsticks, a recent meta-analysis concluded that dipsticks were accurate and useful to rule out urinary tract infection in most patient groups. We agree that clinicians should be reminded that laboratory tests should be interpreted in the context of the clinical findings, risks and benefits.

Transparency declarations

G. G. R. received lecture fees in the past from pharmaceutical companies for lectures on antibiotics that may be used for urinary or respiratory infections. M. P.: none to declare.

References

