

Letter to the Editor

Spinal Cord (2004) 42, 661. doi:10.1038/sj.sc.3101661; Published online 10 August 2004

Reply to Vaidyanathan *et al*

We thank Vaidyanathan *et al* for their extensive response and critical reading of our article.

The remarks of Vaidyanathan and co-workers are supplementary to the problems we described and they provide a workout for (asymptomatic) bacteriuria in spinal cord injury patients in general, which was beyond the scope of our article.

The advice of Vaidyanathan and co-workers not to send urinary samples from asymptomatic spinal cord injury patients is related to ambulatory patients, coming to the clinic for annual check-up. Patients included in our study, however, were hospitalised and did not come for only an annual check-up. In this setting, the data we presented are in accordance with the article of Garcia Leoni *et al*,¹ which, like the other references, was not yet published when we submitted our article. So, indeed we can corroborate that asymptomatic bacteriuria in spinal cord injury patients needs neither investigation nor treatment.

Supplementarily, we would like to add that in our setting urinary cultures might be performed in asymptomatic patients for monitoring resistance patterns, especially in Gram-negative bacteria that are brought from the intensive care unit. This could deliver valuable information needed to decide whether or not and for how long (expensive) isolation is needed. These are, of course, considerations concerning hospital hygiene and are not directly related to an individual patient.

A problem in treating and evaluating spinal cord injury patients is to know when therapy is mandatory. Pain as a symptom can be absent, but other typical manifestations of symptomatic urinary tract infections can still be present in this population (eg autonomic dysreflexia, spasticity, incontinence).¹ Fever urges for immediate treatment, indicating an already complicated infection.

It could be difficult to know when bacteriuria is significant, therefore urinary sediment (especially white blood cells) can be performed^{1,2} and in our study we interpreted this information together with bacterial culture. Criteria for interpreting urinary sediment and culture in this patient population have been published.¹ We think that, although treatment should be started guided by the above-mentioned symptoms, this also

needs to be taken into account while deciding bacteriuria is 'asymptomatic'.

Additionally, measuring specific urinary proteins can give important decisional information in spinal cord injury patients. For example, alpha 1-microglobulin is a very helpful protein that could be integrated in evaluating bacteriuria in some cases.³

The last two examples by Vaidyanathan *et al* are situations not included in our study; we can only confirm that this procedure is recommended by most authorities.¹

In conclusion, we are glad that in fact a consensus still exists: we agree that asymptomatic bacteriuria in spinal cord injury patients does certainly not need to be treated. Treating asymptomatic bacteriuria in spinal cord injury patients has never been practised in our hospital and we never stated that one should treat since there is unanimity about not treating any asymptomatic urinary infection in spinal cord injury patients.² Administering antibiotics in these situations is bad clinical practice and will increase the selectivity pressure on bacteria causing increasing resistance patterns leading to multidrug-resistant bacteria.⁴

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