

MRSA infection in Urine- a urological perspective.

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Introduction

•MRSA is carried in approximately 3 % of the population in the UK. Little is written about it in relation to the urinary tract. MRSA septicaemia carries a grave prognosis, with a documented fatality approaching 50%. MRSA infection is often of great concern to patients due to popular media coverage.

Aim

•This study aimed to look for predisposing factors in patients with MRSA contamination or infections of their urine.

Method

- All patients that had a positive urine culture for MRSA at our hospital between **2004-5** were included in this study.
- Data were collected retrospectively using hospital databases and patient clinical records.
- Details of patients' age, sex, co-morbidities, urine specimen type and previous antibiotic therapy were collated and tabulated.
- Information on antibiotic sensitivities and success of antibiotic treatment was collected by means of a repeat MSU / CSU.

Results

- 41 patients were included in this study
- 15 females: 26 males
- Majority of patients were elderly, mean age was 82 years (range 25-98 years)
- 80% had long-term urethral catheters
- Majority had multiple co-morbidities and acute medical problems (e.g. heart failure / diabetes / dementia / cerebrovascular disease)
- Urinary MRSA was found to be sensitive to Trimethoprim in 90% patients
- 71% of patients treated with antibiotics were found to have cleared MRSA from their urine.
- 3 fatalities occurred in this patient sample – none were due to MRSA septicaemia or infection.

Conclusion

The most significant pre-disposing factors found in these patients were old age, the presence of a urinary catheter and medical co-morbidities. Although MRSA in the urine caused no direct problems to the patient, the patient can contaminate the environment with MRSA potentially posing a threat to others.