

“ESKAPE” in scald burns: what about *Stenotrophomonas maltophilia*?

P Punj^{1,2}, R Briest¹, L Quinn¹, A Jeeves¹, B Carney¹, M Lodge¹, A Sparnon¹

1 Department of Paediatric Burns Surgery, Women’s and Children’s Hospital, North Terrace, South Australia, 5006

2 Email address: puvesh@gmail.com

Key Words

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Introduction

We present a case of a 10-month old infant, scald burn of 55% total body surface area (TBSA) with a positive wound swab for *Stenotrophomonas maltophilia* and our review of bacterial colonisation in scald burn wounds.

Stenotrophomonas maltophilia (formerly known as *Pseudomonas maltophilia* and *Xanthomonas maltophilia*) is a Gram-negative non-fermentative bacillus with a crude mortality rate ranging from 14-69%.^{1,2}

Risk factors for the acquisition of bacteremia of this opportunistic pathogen are malignancies, instrumentation (central venous catheter, mechanical ventilation), prior antibiotics treatments and prolonged hospitalisation.³

The majority of disease burden in the general patient population is represented by infection from *Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacter* species (the “ESKAPE” pathogens).³

Methods

A retrospective review was performed on microbiology wound swabs taken from all paediatric scald burn wounds over a 12-month period from January-December 2014.

Results

A total of 191 cases were identified and reviewed. The majority (62%) of cases were managed in an outpatient setting while the remaining 38% were managed in an inpatient setting. Microorganisms were identified in 30% of wound swabs. A total of 11 different microorganisms were isolated with “ESKAPE” pathogens representing the majority of swab results (82%). Average time to presentation in all patients with a positive wound swab was 4.5 days.

Conclusion

Burn wound infections is a contributor to morbidity, mortality and cost of care. Hence awareness and recognition of opportunistic pathogens is crucial. Publication of trends in locally identifiable microorganism by burns registries would aid in the identification of emerging pathogens.

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