Abstract submission for the 14th World Rural Health Conference

Format: Poster presentation

Theme: Social and environmental determinants of health

Management of Skin and Soft Tissue Infections in an Era of Community-Acquired Methicillin-Resistant Staphylococcus aureus

Aim

Skin and soft tissue infections (SSTIs) are common within the population. Over the last few decades community acquired methicillin resistant Staphylococcus aureus (ca-MRSA) is becoming increasingly prevalent as the causative organism. With increased virulence compared with methicillin sensitive Staphylococcus aureus, ca-MRSA poses a significant risk to the population.

The aim of this project was to look at clinical presentations and management options recommended for ca-MRSA skin and soft tissue infections.

Methods

The project was divided into two parts:

1. Microbiology audit of swabs taken from patients presenting with SSTIs within the Cooktown, Far North Queensland, district and presenting this data to local medical practitioners.

2. Review of the current literature and development of evidence based recommendations for treatment of SSTIs, including those with ca-MRSA.

Results

SSTIs are a common presentation within the Cooktown district. Within one local community the swab culture rates of ca-MRSA are over 50%, whilst overall the rate approaches one third of swabs collected. Also noted were the high rates of dual colonisation of swabs with Staphylococcus aureus (either sensitive or resistant) and Streptococcus pyogenes, again approaching one third.

An evidence based review of the literature suggests that first line treatment for patients presenting with purulent infections is incision and drainage and for those without discharge using oral or iv antibiotics depending on clinical presentation. Recommended management for non-discharging ca-MRSA infections is either clindamycin 300-450mg TDS or Bactrim DS 800/160mg BD. Consideration also needs to be given to decolonisation, particularly in those patients with recurrent or severe infections.

Conclusion

Skin and soft tissue infections caused by ca-MRSA are becoming increasingly common. Because of this understanding local microbiological patterns is important to tailoring empirical and directed management. More needs to be done to consider underlying social determinants to SSTIs to prevent infections occurring and limiting risk of increasing antibiotic resistance.