

S100

Symposium

The extent and reason why MRSA is more common in men

Methicillin-resistant *Staphylococcus aureus* (MRSA) remains an important pathogen worldwide causing life-threatening infections such as bloodstream infection (BSI), ventilator-associated pneumonia (VAP) and complicated skin and soft tissue infections. While there are a few well known staphylococcal virulence determinants that may result in severe infection, e.g. Panton Valentine leukocidin, host factors remain of great importance in terms of predicting the risk of MRSA infection and in helping to predict the outcome. Recognised host risk factors include those related to being MRSA positive such as recent admission to an acute hospital where MRSA is endemic and those relating to the acquisition of the particular infection, e.g. the presence of an intra-vascular catheter predisposing to BSI. However, consistently men are over-represented in data on MRSA, especially that relating to BSI. Explanations for this may relate to pathophysiological difference between males and female as represented by the longer life-span of females, the higher incidence of certain chronic medical conditions amongst males, e.g. cardiovascular disease, occupation, e.g. livestock-associated, and the greater likelihood of males being involved in road traffic accidents or violence which may necessitate admission to the intensive care unit with subsequent BSI or VAP. The reasons for the differences between males and females are rarely highlighted except in passing but are of both intellectual and of practical importance. A greater understanding of why this gender difference occurs may provide further insights to the pathogenesis of MRSA in males, influence therapeutic decisions and finally, help focus preventative measures which may be especially relevant for males.