Importantly, despite infection control measures, the acquisition rate is high, and patients colonized with MRSA on admission are more likely to suffer a MRSA infection during hospitalization.” Zervou et al 2014.

Reference:


Abstract:

BACKGROUND AND OBJECTIVE: Methicillin-resistant Staphylococcus aureus (MRSA) is a significant cause of morbidity and mortality in NICUs and PICUs. Our objective was to assess the burden of MRSA colonization on admission, study the time trends, and examine the significance of MRSA colonization in this population.

METHODS: PubMed and Embase databases were consulted. Studies that reported prevalence of MRSA colonization on ICU admission were selected. Two authors independently extracted data on MRSA colonization and infection.

RESULTS: We identified 18 suitable articles and found an overall prevalence of MRSA colonization of 1.9% (95% confidence interval [CI] 1.3%-2.6%) on admission to the NICU or
PICU, with a stable trend over the past 12 years. Interestingly, 5.8% (95% CI 1.9%–11.4%) of outborn neonates were colonized with MRSA on admission to NICU, compared with just 0.2% (95% CI 0.0%–0.9%) of inborn neonates (P = .01). The pooled acquisition rate of MRSA colonization was 4.1% (95% CI 1.2%–8.6%) during the NICU and PICU stay and was as high as 6.1% (95% CI 2.8%–10.6%) when the NICU population was studied alone. There was a relative risk of 24.2 (95% CI 8.9–66.0) for colonized patients to develop a MRSA infection during hospitalization.

CONCLUSIONS: In the NICU and PICU, there are carriers of MRSA on admission, and MRSA colonization in the NICU is almost exclusively associated with outborn neonates. Importantly, despite infection control measures, the acquisition rate is high, and patients colonized with MRSA on admission are more likely to suffer a MRSA infection during hospitalization.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).