We sought to evaluate risk factors for developing persistent bacteremia due to CoNS CRBSI in infants, in order to identify those who require early aggressive management” Furuichi and Miyairi (2016).

Abstract:

BACKGROUND: Coagulase-negative Staphylococcus (CoNS) is the predominant cause of catheter-related bloodstream infections (CRBSI). Infants in neonatal intensive care units (NICU) often suffer from CoNS CRBSI, which are often refractory to treatment.

METHODS: We conducted a retrospective case-control study of infants in the NICU who developed CRBSI due to CoNS. Patient demographics, condition and management of CRBSI were compared between those with persistent and non-persistent bacteremia. Furthermore, prognosis of infants in the NICU after CoNS CRBSI was evaluated.
RESULTS: Seventy six episodes of CRBSI, including 17 persistent bacteremia and 59 non-persistent bacteremia, were analyzed. In univariate analyses, persistent bacteremia was significantly associated with corrected age equivalent to gestational age of 22-28 weeks at onset of CRBSI, platelet count <100,000/μL (OR = 11.5; P < 0.001), use of vasopressor (OR = 5.38; P = 0.003), and delayed CVC removal (OR = 6.25; P = 0.003). In multivariate analysis, persistent bacteremia was significantly associated with platelet count <100,000/μL (OR = 7.80; P = 0.007), and delayed CVC removal (OR = 5.07; P = 0.03). Infants with persistent bacteremia tended to have a lower survival rate after CoNS CRBSI, however this was not statistically significant (P = 0.21).

CONCLUSIONS: Early CVC removal should be considered for the treatment of CRBSI due to CoNS in infants with platelet counts of less than 100,000/μL.

Reference:

Thank you to our partners for supporting IVTEAM