We observed a high prevalence of early central venous catheter associated blood stream infection mainly in patients with haematological malignancies. Our study highlights the importance of preventive measures in reducing infections in paediatric cancer patients” Moell et al (2018).

Abstract:

AIM: This study examined the clinical characteristics of central line associated blood stream infections occurring within 30 days after insertion versus later infections in paediatric cancer patients, and the subsequent risk for premature catheter removal.

METHODS: This was a retrospective study of children aged 0-18 years who were diagnosed with cancer from 2013-2014 at the Astrid Lindgren Children Hospital, Sweden. Clinical and microbiology data for each patient was collected for 365 days after the central venous catheter was inserted.

RESULTS: During the study period, 154 children received a central venous catheter. The overall incidence of central line associated blood stream infections was 2.0 per 1,000 catheter days. A total of 108 infectious episodes were identified in 44/154 (29%) patients. Of those, 15/44 children (29%) had an early infection within 30 days and alpha-haemolytic Streptococci and coagulase-negative Staphylococci dominated. Children with early infections
were more likely to have a haematological malignancy and to need premature removal of the central venous catheter due to repeated infections.

CONCLUSION: We observed a high prevalence of early central venous catheter associated blood stream infection mainly in patients with haematological malignancies. Our study highlights the importance of preventive measures in reducing infections in paediatric cancer patients.

Reference: