Abstract:

INTRODUCTION: Bacterial intestinal translocation plays an important role in neonatal sepsis. We aimed to elucidate the importance of such translocation in causing central line associated blood stream infection (CLABSI) in patients undergoing gastrointestinal surgery (GIS).

METHODS: Using a database of pediatric patients with CLABSI, patients were divided into those who had a GI-surgery (where intestines were opened), those who had a non-GI-surgery (NGIS; all other types of surgery) and those who had no surgery (NS). Data regarding type of organisms isolated on culture, their resistance patterns, clearance of CLABSI, type of antibiotic therapy and patient demographics were collected.

RESULTS: 117 CLABSI were identified between 2011 and 2018. 26 patients had GIS, 22 had NGIS and 69 had NS. NS patients were younger. 80% of GIS and NGIS patients had a central line at the time of surgery. Coagulase-negative staphylococcus (CoNS) was the most common organism isolated (32%). CoNS was more common in GIS compared to NGIS and NS (58% vs. 9% vs. 29% respectively, p=0.04). There were no differences in the time to resolution of bacteremia, mortality rates or need to remove the central line.

CONCLUSIONS: This information should help inform efforts for prevention of CLABSI in patients undergoing GI surgery with central lines present.

LEVEL OF EVIDENCE: III.

Reference: