The objective of this study was to determine whether the routine use of probiotics was associated with earlier removal of peripherally inserted central catheter (PICC) lines in extremely premature infants born ≤28 weeks’ gestation” Rajput et al (2017).

Abstract:

The objective of this study was to determine whether the routine use of probiotics was associated with earlier removal of peripherally inserted central catheter (PICC) lines in extremely premature infants born ≤28 weeks’ gestation. This study was a retrospective, observational, cohort study in infants born ≤28 weeks gestation in the 2 years before [No Probiotic Group (NPG)] and after the commencement of the routine use of probiotics (Infloran®) in a large tertiary neonatal intensive care unit in the North Island of New Zealand. Age at the removal of PICC line in patients whose first PICC lines were inserted before day 14 and remained in-situ for at least 4 days was compared using Kaplan-Meir Survival Analysis on SPSS 22.0®. We studied PICC line infections as a secondary outcome measure. We compared 120 PICC lines in NPG and 130 PICC lines in PG. Mean age at removal was 25.9 [(95% Confidence Intervals (CI)=22.6 – 29.2)] days in NPG and 23.1 (95% CI=20.9 – 25.2) days in PG. The result was independent of birth weight, gender, type of PICC line and age at insertion but related significantly to gestation at birth (p < 0.001). There was no difference in the incidence or the microbiologic profile of PICC line infections between the study groups. PICC lines were removed 2.8 days earlier in infants receiving probiotics (p=0.070), which can have potential benefits with reduced infection and other risks due to earlier removal of PICC lines.

Reference:

Impact of probiotics on duration of central venous line usage in premature infants


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