



Our objective was to investigate the association of MSB implementation with central line-associated bloodstream infection (CLABSI) in very low birth weight infants” Kinoshita et al (2019).

Abstract:

**BACKGROUND:** The use of peripherally inserted central catheters (PICCs) in neonates differs among various institutions and countries because there are no random controlled trials or large observational studies regarding maximal sterile barrier (MSB) precautions in neonatal intensive care units. Our objective was to investigate the association of MSB implementation with central line-associated bloodstream infection (CLABSI) in very low birth weight infants.

**METHODS:** This was a prospective multicenter observational study in Japan of infants with birth weight less than 1501 grams and in whom a PICC was placed for the first time between October 2014 and March 2017. Risk factors for CLABSI, both related and unrelated to MSB, were assessed by the mixed-effects Cox proportional hazards model, with the neonatal center variable as the random effect.

**RESULTS:** In total, 33,713 catheter-days among 2383 infants were included. We observed 70 cases of CLABSI. MSB precautions were implemented in 13.9% of insertions and were associated with a lower CLABSI risk (adjusted hazard ratio, 0.20; 95% confidence interval, 0.05-0.84).

CONCLUSIONS: We found that MSB implementation during PICC insertion in infants with birth weight less than 1501 grams independently contributed to a decrease in CLABSI risk.

## You may also be interested in...

Impact of discontinuation of contact precautions on CLABSI rates

Taurolidine-citrate line locks prevent recurrent CLABSI

CLABSI rates associated with hemodialysis patients

### Reference:

Kinoshita, D., Hada, S., Fujita, R., Matsunaga, N., Sakaki, H. and Ohki, Y. (2019) Maximal sterile barrier precautions independently contribute to decreased central line-associated bloodstream infection in very low birth weight infants: A prospective multicenter observational study. American Journal of Infection Control. June 29th. doi: 10.1016/j.ajic.2019.05.006. .

