"This study aims to determine the efficacy of CHG-patches in reducing CLABSIs in children" Jitrungruengnij et al (2020).

Abstract:
BACKGROUND: Central line-associated bloodstream infections (CLABSIs) are important hospital-acquired infections. Chlorhexidine-impregnated dressings (also known as Chlorhexidine patches, CHG-patches) are reported to decrease CLABSI in adults. This study aims to determine the efficacy of CHG-patches in reducing CLABSIs in children. METHODS: An open-label randomized controlled trial was conducted in children aged 2 months to 18 years requiring a short-term catheter. Patients were randomized into two groups, allocated to receive CHG-patches or standard transparent dressings. Caring of the catheter was in accordance with APSIC recommendations. CLABSI was defined using NHSN surveillance criteria. RESULTS: From April 2017 to April 2018, 192 children were enrolled. There were 108 CHG-patches catheters and 101 standard dressing catheters contributing to 3,113 catheter-days. The median duration of catheter dwelling was 13 days (interquartile range, 8-20 days). Fifty-percent were placed at the jugular vein and 22% at the femoral vein. There were 23 CLABSI events. Incidence rates for CHG-patches and standard dressings were 7.98 (95% confidence interval, 4.25-13.65) and 6.74 (95% CI, 3.23-12.39) per 1000 catheter-days, respectively (incidence rate ratio 1.18; 95% CI, 0.52-2.70). CLABSI pathogens were 15 Gram-negative, 6 Gram-positive bacteria and 2 Candida organisms. Catheter colonization of CHG-patches and standard dressings were 2.02 (95% CI, 0.42-5.91) and 3.07 (95% CI, 1.00-7.16) per 1000 catheter-days, respectively. Only local adverse effects occurred in 6.8% of the participants. CONCLUSIONS: In our setting, there was no difference in CLABSI rates when the
chlorhexidine patch dressings were compared to the standard transparent dressings. Strengthening of CLABSI prevention bundles is mandatory. You may also be interested in

**CLABSI reduction following chlorhexidine bathing in a hematology-oncology unit**
**Clinical prediction model for CLABSI in children**
**CLABSI in children on home parenteral nutrition**

**Reference:**