

Combined Education and Skin Antisepsis Intervention for Persistently High Blood-Culture Contamination Rates in Neonatal Intensive Care

ABSTRACT

Contaminated blood cultures represent challenges regarding diagnosis, duration of hospitalization, antimicrobial use, pharmacy and laboratory costs.

Facing problematic neonatal blood culture contamination (3.8%), we instigated a successful intervention combining skin antisepsis using sterile applicators with 2% chlorhexidine gluconate in 70% isopropanol prior to phlebotomy (replacing 70% isopropanol) and staff education.

In the six months prior to intervention, 364 neonatal peripheral blood samples were collected. Fourteen (3.8%) were contaminated. In the post-intervention six months, 314 samples were collected. Three (0.96%) were contaminated, representing significant improvement (Fisher's exact test: $P=0.0259$).

No dermatological sequelae were observed. The improvement has been sustained.

SOURCE

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