

Dose topical application of breast milk affect on bacterial colonization in umbilical cord?

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Abstract

Introduction: The umbilical cord is an important site for bacterial colonization. Several agents have been used for umbilical neonatal cord care, and some of them have established bad effects for neonate. In respect to no clinical trial study about human milk effects on bacterial colonization in umbilical cord, we decided to compare the effect of topical application of breast milk and dry cord care on bacterial colonization and cord separation time in neonates. **Materials and Methods:** This is a randomized clinical trial which was done at Omolbanin hospital in Mashhad (Iran) in ۲۰۰۶. ۱۱۸ neonates with ۳۸-۴۲ weeks gestational age, singleton and with ought congenital anomaly were chosen in base of interview and registration information from mother and her neonate, and they divided in two groups, Mother's milk for group ۱, and dry cord care for group ۲. All mothers in two groups received an instructed one-to-one cord care education within ۲ hours of birth. Group ۱ was applied breast milk to the umbilical stump ۲ hours after birth and continued every ۱۲ hours until ۲ days after umbilical cord separation. Nothing was applied to the umbilical stump of the dry cord care group. Three hours after birth and the third day of life, were obtained an umbilical swab either from the base of the cord or from the umbilicus if the cord was already sloughed. Rate of bacterial colonization were recorded in both groups **Results:** The most common cultured organisms were S.Epidemidis, S.Aureus, E.Coli and Klebsiella Pneumoniae in the umbilical stump, there were significant differences between two groups in colonization rate. **Conclusion:** Topical application of breast milk on umbilical cord care leads to reduced bacterial colonization and cord separation time and can be used as easy, cheap, non injury methods for umbilical cord care.

Reaxys Database Information

Author keywords

Bacterial colonization; Breast milk; Topical application; Umbilical cord

Indexed Keywords

EMTREE medical terms: article; bacterial colonization; bacterium culture; breast milk; clinical trial; controlled clinical trial; controlled study; Escherichia coli; gestational age; health education; human; Klebsiella pneumoniae; major clinical study; newborn; patient selection; randomized controlled trial; Staphylococcus aureus; Staphylococcus epidemidis; umbilical cord; umbilicus

ISSN: ۱۶۰۸۷۰۴۶ **Source Type:** Journal **Original language:** Arabic

Document Type: Article