TITLE: Optimal Timing for Newborn Bathing: Clinical Evidence and Guidelines

DATE: 01 December 2010

RESEARCH QUESTIONS

1. What is the clinical evidence regarding optimal timing and conditions of the first bath to ensure newborn safety?

2. What are the evidence-based guidelines for the optimal timing and conditions of the first bath to ensure newborn safety?

KEY MESSAGE

Limited evidence is available regarding optimal timing and conditions of the first bath to ensure newborn safety; bathing 60 minutes post-partum may lead to increased risk of hypothermia.

METHODS

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 11, 2010) via Wiley, CINAHL via EBSCO, University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between January 1, 2005 and November 25, 2010. No filters were applied to limit the retrieval by study type. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
RESULTS

Rapid response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials (RCTs), non-randomized studies, and evidence-based guidelines.

One systematic review and two RCTs were identified pertaining to the clinical evidence regarding optimal timing and conditions for bathing newborns to ensure safety. No relevant health technology assessment reports, non-randomized studies or evidence-based guidelines were identified. Additional information that may be of interest is included in the appendix.

OVERALL SUMMARY OF FINDINGS

Overall, limited evidence is available regarding the optimal timing and conditions for a newborn’s first bath. Evidence from RCTs suggests that bathing with chlorhexidine reduces Staphylococcus aureus colonization on the skin\(^2\) and that a first bath given 60 minutes post-partum increases the risk for hypothermia.\(^3\) Table 1 contains further details of the included studies. No evidence-based guidelines were identified.

<table>
<thead>
<tr>
<th>Author, Year, Study type</th>
<th>Population, study setting, intervention</th>
<th>Results</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walker et al., 2005, SR(^1)</td>
<td>Newborns Setting not reported Soaps and detergents in bathwater, emollients, lotions and moisturizers on skin</td>
<td>No studies identified</td>
<td>Authors concluded that clinicians should be aware that the effect of soaps, detergents, emollients, lotions and moisturizers on newborn skin has not been formally investigated.</td>
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<td>Da Cunha et al., 2008, RCT(^2)</td>
<td>Newborns receiving first bath Hospital setting, timing of bath not indicated Chlorhexidine bath versus bath with liquid soap</td>
<td>Staphylococcus aureus colonization was more prevalent on the skin of newborns bathed with soap than those bathed with chlorhexidine.</td>
<td>Authors concluded that the first bath with chlorhexidine reduced S. aureus colonization on skin for the 24 hour period following the bath.</td>
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<td>Bergstrom et al., 2005, RCT(^3)</td>
<td>Newborns Referral hospital Bathing 60 minutes post-partum versus no bathing</td>
<td>Prevalence of hypothermia (defined as body temperature &lt;36.5 °C) was significantly higher at 70 minutes and 90 minutes in the bathed group.</td>
<td>Authors concluded that bathing newborns shortly after birth increased the risk for hypothermia despite efforts for thermal protection.</td>
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RCT = randomized controlled trial; SR = systematic review
REFERENCES SUMMARIZED

Health technology assessments
No literature identified.

Systematic reviews and meta-analyses

Randomized controlled trials

Non-randomized studies
No literature identified.

Guidelines and recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Clinical practice guidelines


Additional references

