

# Extremely premature infants' reactions to skin-to skin contact

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## Background

Skin-to-skin (sts) contact is the first step in the breastfeeding process for the premature infant. That is one of the reasons why we want to promote initiatives, which insure that the preterm infant gets sts-contact with his parents.

The benefits of sts-contact for extremely premature infants (<28 weeks postmenstrual age) are not as well supported as for other premature infants.

## Aim

To determine if extremely premature infants, with post menstrual age <28 weeks, can keep adequate temperature during skin-to-skin contact with their parents without negative effects when transfer from incubator and position are optimized.

To remove barriers for early parent-infant contact and strengthen parental competence.

## Material and methods

Triangulation between

- A prospective clinically intervention study, where the infants serve as their own control group, in a pre-test, test, post-test design
- Individually semi-structured interviews with the parents.

Continually measurements of 22 stabile infants' physical parameters 2 hours before, during, and 2 hours after sts-contact. Sts-contact has to last for minimum one hour.



## Ethical considerations

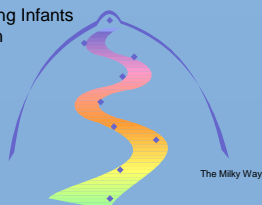
We have chosen a pretest-test-posttest design instead of randomization, because we consider it to be unethical, if we - due to randomization - prevent infant and parent in having sts-contact when it is possible, especially because this will be some of the first sts-sessions.

The Biomedical Research Ethics Committee Capital Region has approved the project.

## No results yet

The study is still going on (October 2008)

The "Knowledge Centre for Breastfeeding Infants with Special Needs" is very interested in establishing an international research network in breastfeeding infants with special needs for mutual inspiration and experience exchange. Please contact Ragnhild Maastrup at the conference or by e-mail.



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## Criterion for stability

Inclusion	Exclusion
<ul style="list-style-type: none"> <li>•Can be on conventional mechanical ventilation or have nasal-CPAP treatment</li> <li>•Can need oxygen up to 70% before transfer</li> <li>•Can have umbilicum catheters or intravenous lines</li> <li>•Can get pressure-support, but should have stabile blood pressure with the treatment</li> <li>•Minimum temperature 36,5° C before transfer</li> </ul>	<ul style="list-style-type: none"> <li>•Labile infant with many stimulation required bradycardies/desaturations or ventilation required apnoeas the 3 hours ahead of or in the pre-test period</li> <li>•If the infant is labile when manipulated or disconnected from the ventilator</li> <li>•Pleura drainage</li> <li>•Advanced mechanical ventilation (HFO, NO)</li> <li>•Febrile (infant or parent)</li> </ul>

## Optimizing transfer and position

- The staff and parent have warm hands.
- The infant is transferred in a warm blanket with plastic inside.
- Heat loss is prevented by using the shortest way between incubator and parent, preferable with the parent standing by the incubator, taking the infant up to her chest, and afterwards sitting down.
- The infant will be placed on the parent's chest in a prone or side position with flexed hips and knees; the blanket will be moved from the infant's front, in order to get full skin-to-skin, but still covering the infant's back.
- Another blanket will be formed as a "U", and placed around the infant in order to create a warm and moist microclimate.
- Upon this the warm duvet from the incubator is placed.
- The infant is only wearing a cap and diaper.

## Bibliography

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