



Infants that have special needs regarding breastfeeding should have opportunities for establishing breastfeeding

- "The Knowledge Centre for Breastfeeding Infants with Special Needs" was established in 2005.
- Guidelines were developed.

Education

- Neonatal Intensive Care Unit
 - 3 hours for all new staff
- Obstetric and paediatric units
 - 2 hours at breastfeeding introduction days for all new staff
- Experienced nurses, midwives and the breastfeeding group
 - half day courses

Parent information

- As flyers
- Can be downloaded from the Internet (free access)

Infants with Limited Physical Capacity

Reasons: hypothermia, weak suck, get tired

- Immaturity/prematurity
- Acute and chronic illness
- Congenital heart disease
- Neurological impairment
- Other hypothermia
- Technical difficulties

Early information to the parents

(Callen 2005)



Initiating breastfeeding at an early stage

- Encourage early and prolonged skin-to-skin contact (Nyqvist 2005)
- Encourage early contact between infant's mouth and mother's nipple



GA 26+5, PMA 27+2



Response

Always be aware of the infant's responses (Nyqvist 1996)

Imbalance



Balance



Optimizing milk flow

- The mother has enough milk
- The mother stimulates her "let-down reflex" before breastfeeding
- The mother massages the breast during breastfeeding
- The infant is offered a soft breast
- Use of feeding-tube device if the mother does not have enough milk

(Häggkvist 1998)



Stimulate and enhancing the infant's sucking reflex

- Stimulate the grasp reflex (not for premature infants <34 weeks PMA), and stimulate spit-secretion (Häggkvist 1998)
- Show the mother how to help the infant to keep the body flexed (Nyqvist 2002)
- Support the infant's feet



Optimizing position and latching onto the breast

- Full body contact between mother and infant, as well as support the infant's head and entire body (Spatz 2004, Morton 2002, Nyqvist 1996)
- Suck stimulation to infants with severe brain damage (Marmet 1984, Bovey 1999)
- Finger feeding (Marmet 2000, Bovey 1999)
- Dancer hand (Riordan 2005, Danner 1992)
- Front position (Häggkvist 1998)



Finger feeding

- Correcting suck technique
- Stimulating the "S-spot" (Marmet 2000, Oddy 2003, Bovey 1999, Danner 1992)





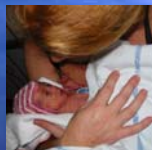
Optimizing the infant's alert periods



- The infant is carried skin-to-skin as much as possible (*Spatz 2004*)
- Wake the infant up when he/she is sleeping lightly



Skin-to-skin contact and breastfeeding



- The consequences of separation can be remedied (*Christenson 1995*)
- The parents can catch all the infant's hunger cues
- The infant may get longer periods in the "alert and quiet" phase (*Chwo 2002*)
- The infant will wake up from the parent's movements (*Spatz 2004*)
- Skin to skin contact can be caught up



Keeping the infant awake

- Change diaper during breastfeeding
- Change breast often – only for limited use
- Use nipple shield if other interventions did not help

(*Clum 1996, Meier 2000*)



Off the tube feeding

- Gradually reduce the amount of milk given in the tube feeding as the infant breastfeeds more
- Only take away the tube feeding if the infant is healthy enough to respond positively and breastfed more
- Only introduce bottle feeding if exclusively breastfeeding is given up by the mother



Breastfeeding with CPAP

Premature GA 25+6
PMA 37 weeks
CPAP 4 cm
31% O₂
Breastfeeds half of the prescribed volume



Premature GA 25
PMA 48 weeks
CPAP 10 cm
88% O₂
Breastfeeding at daytime, tube feeding at night



Key points

- Support the infant
- Exploit the infant's potential
- Be patient



Thank you for your attention



Bibliographie

- Bovey A, Noble R, Noble M. Orofacial exercises for babies with breastfeeding problems? *Breastfeed Rev.* 1999 Mar;7(1):25-8
- Callan J, Pinelli J, Atkinson S, Sutgall S. Qualitative analysis of barriers to breastfeeding in very-low-birthweight infants in the hospital and postdischarge. *Adv Neonatal Care.* 2005 Apr;5(2):93-103
- Christensson K, Cabrera T, Christensson E, Uvnas-Moberg K, Winberg J. Separation distress call in the human neonate in the absence of maternal body contact. *Acta Paediatr.* 1995 May;84(5):468-73
- Clain D, Prunomo J. Use of a silicone nipple shield with premature infants. *J Hum Lact.* 1996 Dec;12(4):287-90
- Chiro MJ, Anderson GE, Good M, Dowling DA, Shiao SH, Chu DM. Randomized controlled trial of early kangaroo care for preterm infants: effects on temperature, weight, behavior, and acuity. *J Nurs Res.* 2002 Jun;10(2):129-42
- Danner SC. Breastfeeding the neurologically impaired infant. *NAACOGS Clin Issu Perinat Womens Health Nurs.* 1992;3(4):640-6
- Haggkvist AP. Amning af born med specielle behov. *Statens Helsestilsyn* 1998, Norway
- Isaacson LJ. Steps to successfully breastfeed the premature infant. *Neonatal Netw.* 2006 Mar-Apr;25(2):77-86
- Marmet C, Shell E. Training neonates to suck correctly. *MCN Am J Matern Child Nurs.* 1984 Nov-Dec;9(6):401-7
- Marmet C, Shell E, Aldana S. Assessing infant suck dysfunction: case management. *J Hum Lact.* 2000 Nov;16(4):332-6
- Meier PP, Brown LP, Haux NM, Spatz DL, Engstrom JL, Borucki LC, Krouse AM. Nipple shields for preterm infants: effect on milk transfer and duration of breastfeeding. *J Hum Lact.* 2000 May;16(2):106-14; quiz 129-31
- Morton JA. Strategies to support extended breastfeeding of the premature infant. *Adv Neonatal Care.* 2002 Oct;2(5):267-82. Review
- Nyqvist KH, Ewald U, Sjoden PO. Supporting a preterm infant's behaviour during breastfeeding: a case report. *J Hum Lact.* 1996 Sep;12(3):21-8
- Nyqvist KH. 2002. Feeding and breastfeeding in the NICU – history, new research, and changes in policies and practices. *Suomen Neonataalhoitajat ry* 2002 (1) 17-25
- Nyqvist KH. Breastfeeding support in neonatal care: An example of the integration of international evidence and experiences. *Newborn Infant Nurs Rev.* 2005 Mar;5(1):24-48
- Oddy WH, Gleam K. Implementing the Baby Friendly Hospital Initiative: the role of finger feeding. *Breastfeed Rev.* 2003 Mar;11(1):5-10
- Riordan I. *Breastfeeding and Human Lactation*, Third edition, Jones and Bartlett Publishers 2005
- Spatz DL. Ten steps for promoting and protecting breastfeeding for vulnerable infants. *J Perinat Neonatal Nurs.* 2004 Oct-Dec;18(4):385-96. Review