Elevated side-lying positioning for bottle feeding

Trust ref: C28/2015

1. Introduction and Who Guideline applies to

This guideline is aimed at all health care professionals involved in the care of infants within the Neonatal Service.

Related documents:

Elevated Side Lying Positioning for Bottle Feeding UHL Neonatal Guideline.pdf **C27/2015**

Key Points

- Elevated side-lying positioning (ESL) is a strategy that has been shown to improve oral feeding in preterm infants by supporting physiological stability, measured by heart rate and oxygen saturation during feeding.
- ESL can therefore help reduce the risks associated with feeding in this group such as desaturation, bradycardia and aspiration.

Aim

ESL should be considered for all preterm infants when bottle feeding is being introduced and established. It is also likely to be beneficial for term infants where physiological stability is affected during feeding.

Background

Feeding difficulties in preterm infants are frequently reported in the literature, especially in those who are very preterm. The difficulties include increased physiological instability, poor sucking patterns, poor coordination of breathing with sucking and swallowing, limited oral intake and prolonged length of time to full and proficient oral feeding (Park et al 2014). Early difficulty with feeding can place a preterm infant at risk, in the short term with reduced oxygen saturations, bradycardic episodes and aspiration, as well as having an impact on feeding in the longer term (Clark et al 2007).

Physiological stability is the primary requirement for bottle feeding. Therefore, feeding strategies should focus on maintaining physiological stability throughout feeding to support endurance, optimal oral intake and comfort (Ross et al 2011; Girgin et al 2018).

The elevated side-lying position (ESL) is a strategy that has been shown, in small scale studies, to better support physiological stability during bottle feeding as compared with elevated supine positioning (Raczyńska and Gulczyńska 2019).

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2. Process / Procedure

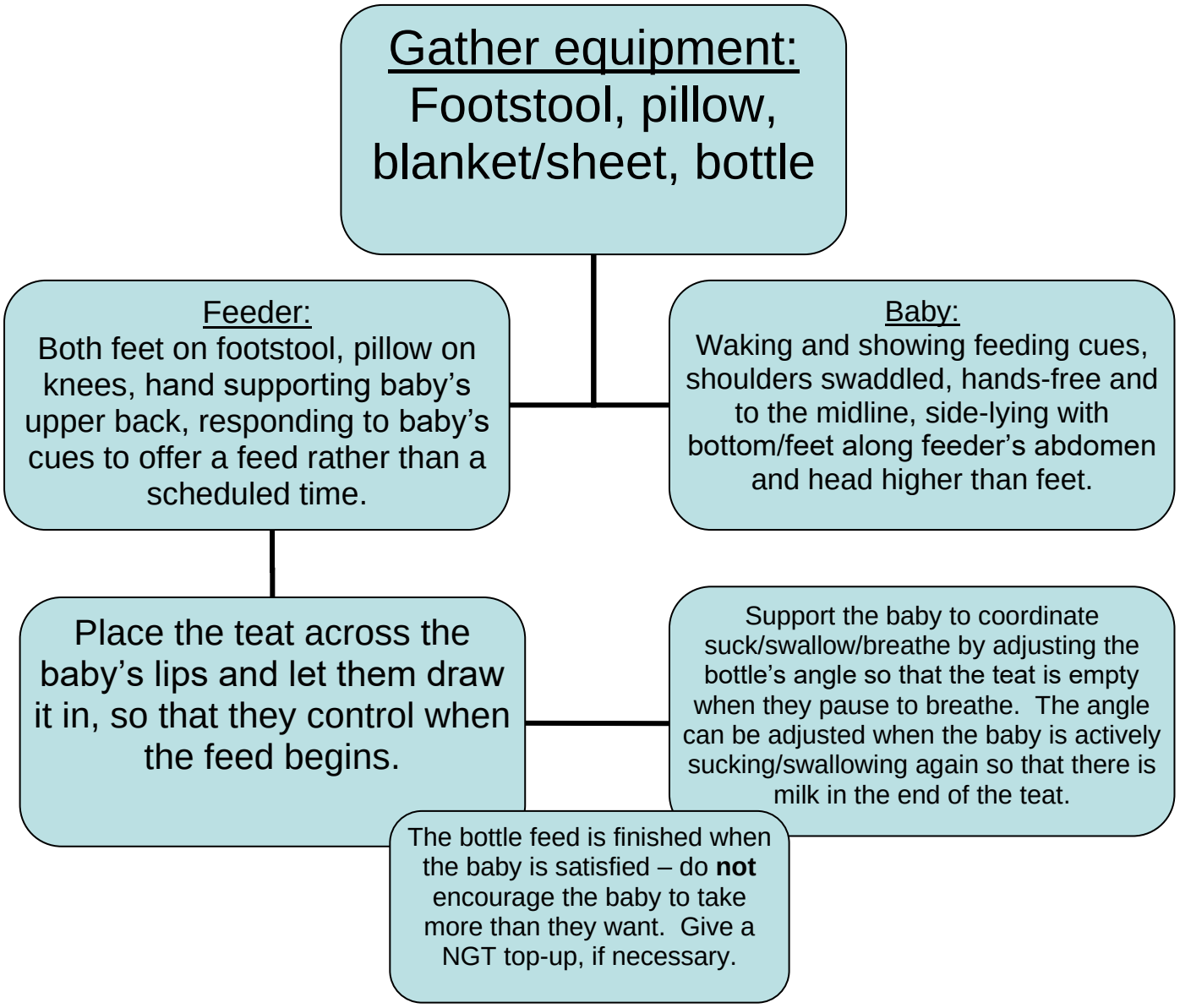
Assessment of the infant's readiness and physiological stability prior to offering a feed is essential. ESL is intended to maintain stability during feeding when this is already present. The feeder should sit comfortably with the knees higher than the base of the lap, so that the level of the baby's head will be higher than their feet. A footstool should be used to achieve this.

Permission given for clinical guideline & infant feeding teaching, 2021.

The infant is placed in a side-lying position on the feeder's lap, with head at the top of the lap and bottom against the feeder's stomach. The head and trunk should be elevated to approximately a 45° to 60°angle, higher than the feet

The infant's neck and spine should be in a natural straight alignment and hips flexed at 90° allowing the legs to curve around the feeder's stomach. A pillow can be used for extra support and appropriate elevation. The feeder should **not** cross their legs or lift the baby off their lap to achieve this elevation, as this unsupportive position restricts the baby's ability to pace their feed.

The baby's shoulders can be swaddled with a blanket or thin sheet with their hands free, the feeder supporting the top of the baby's back. Supporting the baby's posture in this way not only promotes their comfort and feeling of safety, but this natural feeding position allows the baby more control in pacing the feed (Clark et al 2007).



3. Education and Training

This is included in responsive bottle feeding education within BFI study days on commencement, during practical skills reviews, on annual updates, and at ad hoc teaching opportunities.

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Parent satisfaction	Parent satisfaction survey	Senior Neonatal Homecare Nurse		Neonatal governance group
Nursing updates	Observational audit	Senior Neonatal Homecare Nurse		Neonatal governance group

5. Supporting References

Grade of evidence	Reference
B	Clark,L; Kennedy,G; Pring,T and Hird,M (2007) Improving Bottle Feeding in Preterm Infants: Investigating the Elevated Side-lying Position. *Infant.* Vol 3, Issue 4, pp154-158
A	Girgin, BA; Gözen, D; and Karatekin, G (2018) Effects of Two Different Feeding Positions on Physiological Characteristics and Feeding Performance of Preterm Infants: A Randomized Controlled Trial. *Journal for Specialists in Pediatric Nursing.* Vol 23, No2, pp e12214
B	Park,J; Thoyre,S; Knafl, GJ; Hodges, EA and Nix, WB (2014). Efficacy of Semielevated Side-Lying Positioning During Bottle Feeding of Very Preterm Infants. *Journal of Perinatal & Neonatal Nursing.* Vol 28, No 1, pp 69-79
B	Raczyńska, A and Gulczyńska, E (2019) The Impact of Positioning on Bottle-feeding in Preterm Infants (≤ 34 GA). A Comparative Study of the Semi-elevated and the Side-lying position - a Pilot Study. *Developmental Period Medicine.* Vol 23, No 2, pp 117-124
B	Ross, ES and Philbin, K (2011) Supporting Oral Feeding in Fragile Infants. *Journal of Perinatal & Neonatal Nursing.* Vol 25, No 4, pp 349-357
C	Warren, I and Bond, C (2010). *A Guide to Infant Development in the Newborn Nursery, 5th edition.* London: Winnicott Foundation UK

Evidence Criteria

Evidence according to RCPCH

Grade A	At least 1 randomised controlled trial addressing specific recommendation
Grade B	Well conducted clinical trials but no randomised trial on specific topic
Grade C	Expert committee report or opinions

6. Key Words

Infant feeding, family centred care, family integrated care, developmental care

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The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

Contact and review details			
Original Author: Karen Hayden and Jo Naylor **Guideline Lead (Name and Title)** Amanda Smith - Senior Neonatal Homecare Nurse			**Executive Lead** Chief Nurse
Details of Changes made during review:			
Date	**Issue Number**	**Reviewed By**	**Description Of Changes (If Any)**
May 2015 - **Sept 2015**	**1**	Submitted for review	(approved) Minor editorial changes
		Neonatal Governance Meeting	
		Guidelines lead	
Aug 2018	**2**	Neonatal Guidelines and Governance Meetings	
November 2021 - January 2022	**3**	Neonatal Guideline Meeting	Added positioning images Added advice of feeders leg position, utilising a foot stool, swaddling of baby's shoulders, responsive feeding advice. Flow chart incorporating all advice.
		Neonatal Governance meeting	Ratified
December 2024	**4**	Neonatal Guidelines and Governance Meetings	No changes