The Shrewsbury and Telford Hospital NHS Trust

Antenatal Colostrum Collection

Version 5

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Comments	:	Any references to SaTH guidelines/protocols in the text pertain to the latest version of the guideline on the intranet **This guideline should be read in conjunction with** ▪ Maternity Newborn Feeding Guideline (SaTH) ▪ Maternity Guideline – Pre-existing and gestational diabetes (antenatal, Intrapartum and postnatal management).
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VERSION	IMPLEMENTATION DATE	HISTORY	RATIFIED BY	REVIEW DATE
1	April 2010	New guideline following of guidelines of	MGG and Maternity Governance	April 2013
2	24th May 2011	Minor amendment to monitoring	MGG	May 2014
3	1st May 2014	Full Review	MGG	May 2017
4	16th August 2017	Full Review	MGG Maternity Governance	August 2022
4.1	16th March 2018	▪ Revision to clarify gestation (36 weeks) for antenatal colostrum harvesting section 5.1.2 Removed section 5.1.3 ▪ Addition of hyperlinks to Gestational Diabetes internet page	MGG	August 2022
4.2	November 2022	Audit & Monitoring paragraph updated to reflect new process		
5	27th June 2023	Full Review	Maternity Governance	June 2026

1.0 Introduction

In this guideline we use the terms 'woman' or 'mother' throughout. These should be taken to include people who do not identify as women but are pregnant or have given birth.

1.1 Babies at risk of developing hypoglycaemia

Babies born to mothers with diabetes in pregnancy, either pre-existing (Type 1 or Type 2) Diabetes Mellitus (DM) or Gestational Diabetes (GDM), are at risk of developing hypoglycaemia in the first few hours after birth (Hartman 2004). If the baby is unable to feed soon after birth and /or colostrum is unable to be expressed, the baby is likely to be fed artificial milk to ensure correct blood sugar levels.

1.2 Babies at increased risk of developing Type 1 DM

Antenatal expression of colostrum will allow storage of small amounts of colostrum which will reduce the need to use artificial milk. The use of artificial milk in babies, where there is a family history of Type 1 DM, has been associated with an increased risk of developing Type 1 DM (Mayer et al, 1998; Oscroft, 2001).

1.3 Prevention of women developing Type 2 DM

Women with GDM are twice as likely to develop Type 2 DM later in life if they do not lactate following the birth of a baby whose pregnancy provoked GDM (Kjos et al, 1993). Lactation, even for a short duration, improves glucose metabolism and is a low cost intervention that may reduce or delay the development of Type 2 DM.

1.4 Babies with the potential for feeding difficulties

When it is suspected that a baby may have problems breastfeeding due to antenatal identification of a problem e.g. cleft lip and palate, there may be a benefit from having an available supply of stored colostrum to offer them the best chance of receiving the benefits of breast milk.

2.0 Aim

To facilitate a method which enables the expression of colostrum in the antenatal period for women in the inclusion criteria, in order to reduce the use of artificial milk when not medically indicated and/ or not the mother's choice.

3.0 Objectives

3.1 To prepare women for the post natal period by promoting a supply of colostrum expressed ready for the baby in the early hours after birth

3.2 To ensure that women in the inclusion criteria are advised and educated in the skill of hand expression of breast milk.

3.3 Women in the inclusion criteria will be supported by midwifery practice as outlined in the Newborn Feeding Guideline (SaTH)

4.0 Definitions

4.1 Inclusion criteria – women considered eligible for inclusion

- Women with diabetes in pregnancy.
- Women whose babies have been diagnosed antenatally with a problem that can be associated with early feeding problems.

4.2 Exclusion criteria - women not considered eligible for inclusion

- Women who decline following informed choice about the benefits of antenatal expression.
- Those women on medication where breastfeeding is contraindicated.

4.3 Diabetes Specialist Midwife (DSM)

A midwife who has undertaken additional specialised training in the care and management of the pregnant diabetic mother.

4.4 Lactation Consultant Midwife (LCM)

Midwives who have an additional qualification from the International Board of Lactation Consultants.

5.0 Process

5.1 Antenatal Period

5.1.1 Booking.

The midwife responsible for the antenatal booking will raise awareness of the benefits of breastfeeding and refer to the relevant SATH information regarding this.

5.1.2 Women diagnosed with diabetes.

The Diabetes Specialist Midwife will review these women and commence a specialised care pathway (SaTH). The DSM will promote breastfeeding to these women and will inform them about the effects of breastfeeding on glycaemic control. Information regarding the benefits of antenatal expression of colostrum will be given and supported by the patient information booklet, 'A Mother's and others Guide to Breastfeeding' (Abbett 2020).

5.1.3 Women wishing to undertake antenatal expression of colostrum.

In the midwife led GDM clinic the woman will be informed of the benefits of antenatal colostrum collection and if wishing to proceed the woman will be educated and advised how to begin this process. Advice on the collection and storage of colostrum will be provided, so the mother has access to a store of her own frozen colostrum during the first few days of her baby's life. This can then be used to help stabilise the baby's blood glucose. Also refer to Gestational Diabetes UK who provides an excellent source of information for women on colostrum harvesting.

- All women in the inclusion criteria will have the opportunity to discuss the principles of breast massage and hand expression of colostrum. The technique will be demonstrated using instructional aids and 'A Mother's and others Guide to Breastfeeding leaflet' (Abbett2020). The woman will be encouraged to become familiar with her breasts. The midwife will provide the woman with sterile containers for colostrum collection.
- In the preceding weeks to the birth of her baby the woman will be advised to: practice the technique and commence collection of colostrum **from 36 weeks; clearly label any collected colostrum with her name, date of birth and date of collection;** collect up to3 times a day freeze collected colostrum as per 'Mothers and others Guide to Breastfeeding' instructions (Abbett 2020).
- When admitted in labour, frozen colostrum will be brought to hospital in a cool bag and labelled and stored in the appropriate fridge / freezer on the ward or Delivery Suite freezer to which the woman is admitted. Women will be encouraged to continue expressing when they are admitted.
- Any woman wishing to undertake antenatal expression of colostrum can do so and be instructed by her Community Midwife from 36weeks onwards, a colostrum collection kit can be issued.

5.2 Intrapartum care

The Midwife responsible for the delivery will promote skin to skin contact and good positioning and attachment. Babies of mothers who have diabetes receive transitional care after birth and will be transferred to the consultant postnatal ward where blood glucose levels will be monitored as per the transitional care guideline. Hand over to the postnatal ward will include information relating to any stored colostrum.

5.3 Postnatal period

The midwives, neonatal nurses, Maternity support workers and women's services assistants will be responsible for the safe storage and use of the mother's colostrum. This will be used as per Newborn Feeding Guideline (SaTH).

6.0 Training

Midwives will be required to attend an initial 2 day UNICEF accredited Baby Friendly breastfeeding management course, in addition an annual update on breastfeeding (refer to training needs analysis).

During the Baby Friendly training they will be made aware of the antenatal expression of colostrum and the provision of this guideline to help midwives.

7.0 Monitoring/audit

Compliance with this guideline / SOP will be monitored by Infant Feeding Co-ordinator

8.0 References

Abbett M (2020) A Mother's and others Guide to Breastfeeding. RL Advertising, Nottingham

Hartman Peter and Cregan Mark (2004) Department of Biochemistry, university of WA. Symposium: Human Lactogenesis 11: Mechanisms, determinants and consequences lactogenesis and the effects of insulin-dependant diabetes mellitus and prematurity. Arch Dis Child : 89:267-271.

Kjos SL, et al (1993) The effect of lactation on glucose and lipid metabolism in women with recent gestational diabetes. Obstetrics and Gynaecology, 82:451-455.

Mayer EJ, Hamman RF, Gay EC, Lezolite DC, Savitz DA and Klingensmith GI (1998) Reduced risk of IDDM among breastfed children. Diabetes 37:1625-1632.

Oscroft R. (2001) Antenatal expression of colostrum. Practising Midwife 2001 April 1 (1) 32-35.

SaTH Maternity Training guideline (with Training Needs Analysis appendix).

SaTH Maternity Guideline Diabetes – Antenatal Care for Women with Pre Existing Diabetes

SaTH Maternity Guideline Newborn Feeding

SaTH Maternity Guideline Transitional Care

SaTH Neonatal Guideline Neonatal Hypoglycaemia

Cox, S. Expressing and storing colostrum antenatally for use in the newborn period. Breastfeeding Review Nov 2006.

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