Title: ANTENATAL EXPRESSION OF COLOSTRUM for mothers with diabetes and other mothers whose babies are likely to have feeding difficulties.

Description: Facilitating exclusive breast feeding for neonates at risk of receiving artificial formulae when not medically indicated and/or not the mother’s choice.

Target Audience: All staff of Integrated Women’s Health Unit (IWHU) in all areas.

Related Policy/Procedure: Clinical Care Policy CHSD-Coc-Pol-Dist-Exe35-V1-8/07

PRINCIPLE:
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 hours after birth. 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 stable levels of blood sugar. Research has indicated that artificial milk contains bovine serum albumin which is associated with generating an auto-immune response. This autoimmune response has been associated with an increased risk of Type 1 DM for the infant particularly where there is also a family history of Type 1 DM. Antenatal expression of colostrum will allow storage of a small amount of colostrum which will reduce the use of artificial milk with babies at increased risk of Type 1 DM. Antenatal expression of colostrum will increase the mother’s awareness of how her breasts function and increase the mother’s confidence with breastfeeding. Babies diagnosed antenatally with cleft lip and/or palate will also benefit from having an available supply of stored colostrum.

OBJECTIVES:
- Observation of the WHO and UNICEF’s “10 Steps to Successful Breastfeeding” Step 6. “Give new-born infants no food or drink other than breast milk unless medically indicated.” or mother’s choice.
- To develop the skill of hand expression of breast milk
- To encourage a generous supply of colostrum
- To have colostrum readily available for the baby in the early hours after birth
- To provide the baby with the opportunity to breastfeed (if desired or possible)
- To establish and maintain a good milk supply for the baby to receive the recognised health benefits of breast milk.

PROCESS:
Identify problem area:
1. Women with Diabetes in pregnancy (those with pre existing Type 1 and Type 2 and Gestational Diabetes.)
2. Cleft lip and/or plate diagnosed by 20 week scan
3. Other conditions that may indicate the possibility of early feeding problems.
Up to 32 weeks gestation:

- Ensure parents are aware of the specific health benefits of colostrum and breast milk.
- Encourage attendance at parent education sessions.

32-35 weeks gestation:

- Using information leaflets and other instructional aids to discuss the principles of breast massage and hand expression of colostrum/milk. Demonstrate the technique if applicable, encourage mother to become familiar with her breasts.

36 weeks onwards:

- Practice of technique and demonstration with the option to collect colostrum.
- Supply mother with sterile containers (specimen jars/syringes with caps) for colostrum and identity labels.

Technique:

- Pay attention to personal hygiene: wash hands prior to expressing.
- Suggest expressing after bath or shower as heat may increase flow of colostrum.
- Sit in an upright position, lean forward slightly, use both breasts twice.
- It should be comfortable: contact midwife or lactation consultant if uncomfortable.
- Start with breast massage to encourage let down reflex.
- Make a C-shape with hand around edge of areola.
- Gently and rhythmically roll thumb towards end of nipple.
- When colostrum drips quite easily it is a suitable time to start collecting and storing colostrum. Sterile containers are provided with labels.
- Move hand position around areola to drain all areas.
- Swap to other breast when flow slows down.
- Use both breasts at least twice each session.
- Colostrum can be collected at two or three sessions during the same day; ensure collection container is stored in the refrigerator between sessions.
- At the end of the collecting day the colostrum can be frozen.* Attach an identifying (name) label to the container and include the date of expressing.
- The colostrum can be frozen until the time comes for the baby’s birth.
- Frozen breastmilk may be stored for 2 weeks in freezer compartment inside refrigerator. 3 months in freezer section of refrigerator with separate door. 6-12 months in deep freeze (-18°C or lower)

Birth:

1. Skin-to-skin contact, encourage good positioning and attachment as soon as possible. Monitor blood glucose levels as indicated and use fresh or defrosted colostrum when/if necessary.
2. Skin to skin contact, encourage good positioning and attachment (if mother wants to). Alternatively hand express colostrum or use defrosted colostrum. Establish good pumping routine to build up an abundant milk supply.
3. As for 1. or 2. as appropriate.
Evaluation Method:

- Identification of cohort of women who choose to follow Protocol for Antenatal Expression of Colostrum due to anticipated breast feeding difficulties by chart sticker (AN EBM)
- Identification of similar cohort of women who do not choose to follow this Protocol.
- Follow up with breast feeding statistics comparison between cohorts to see if objectives have been met.

Developed By: Midwifery Staff with input from Dr. Paul Howatt, Consultant Obstetrician and Diane Bond, NUM, Diabetes Centre
Authorised By: Glynda Summers, Executive Director of Nursing

Last Review Date: New Protocol
Next Review Date: April 2008
Effective Date: April 2005

REFERENCES


