

Breast feeding, Anaesthesia and Surgery

It is not uncommon for women to undergo surgical procedures, elective or emergent, in the postpartum period when they are breastfeeding. The standard approach of discarding breastmilk for 24 hours following anaesthesia is outdated and **mothers should be encouraged to breastfeed up until admission and may breastfeed postoperatively as soon as they are adequately alert and oriented to hold the infant.**

Drug transfer into breast milk depends on various pharmacological properties including protein binding, lipid solubility, molecular weight, pka via passive diffusion proportional to maternal plasma level. Medications that are highly lipid soluble, of low molecular weight with limited protein binding are more likely to be transferred into breast milk. The majority of commonly used anaesthetic medications are safe.

Preoperative

- Breastfeeding mothers should be encouraged to express milk ahead of the surgery and if having a period away from infant, to bring own breast pump to avoid engorgement.
- Allow breastfeeding up until period of admission
- Breastfeeding mothers should be placed first on list to reduce fasting times

NB: At Preassessment-inform list anaesthetist, day surgery and theatre scheduler if patient due to be admitted who is breastfeeding, noting requirement for single room postoperatively and requirement for baby and carer visiting. Also inform the infant feeding team on 01698 361100 page 139 or via maternity coordinator on 7890.

Intraoperative

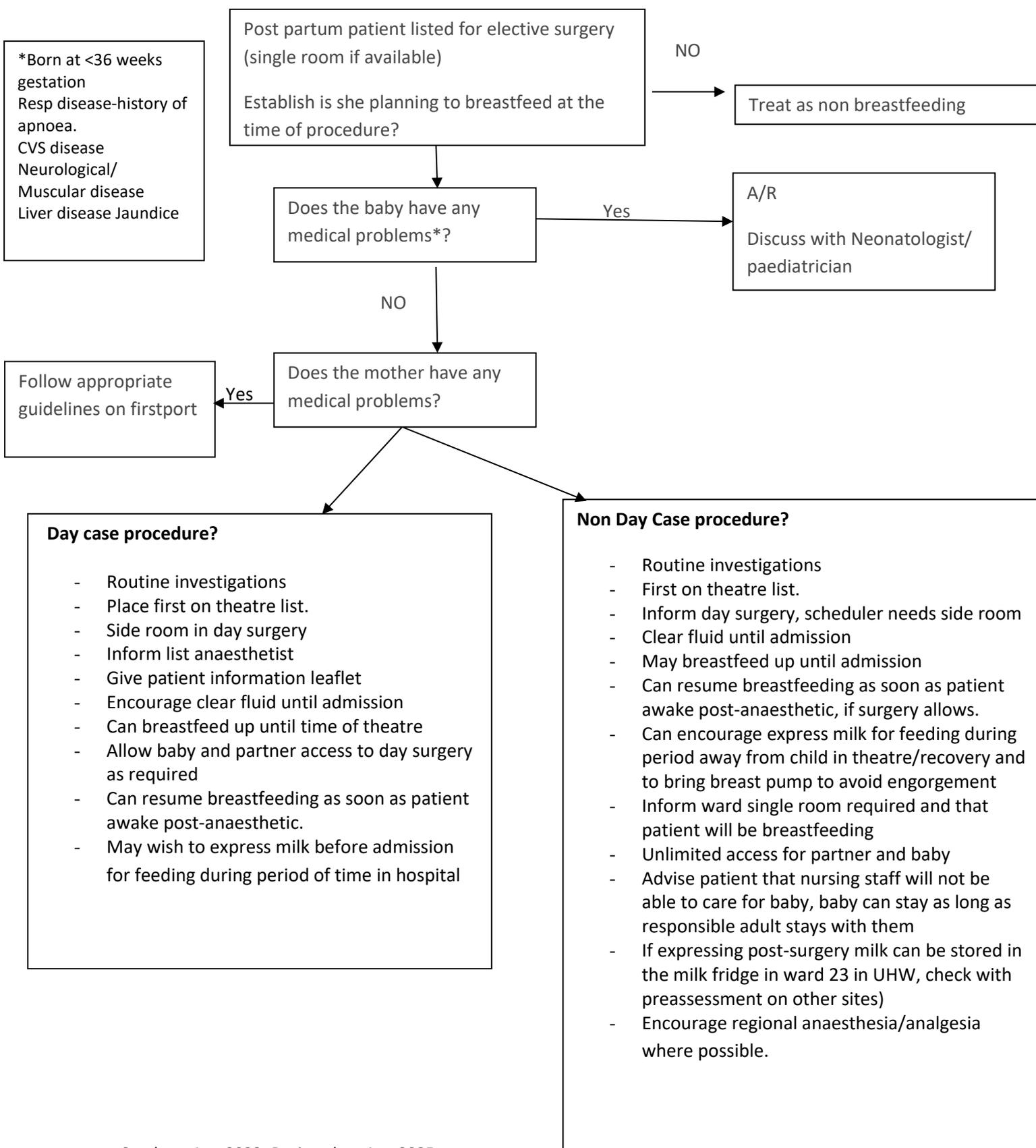
- Consider regional anaesthetic technique to minimize use of systemic sedative medications.
- Most anaesthetics and analgesics are safe when breastfeeding and **elective surgery should not be postponed because of breast feeding**
- Ensure postoperative nausea and vomiting prophylaxis
- Minimize need for opioids.

Postoperative

- Mothers with term, healthy children may breastfeed as soon as they are awake in the recovery room.
- Non opioid, non-sedating medications such as paracetamol and ibuprofen should be chosen as first line for pain management.

- Codeine should **not** be used due to its highly lipophilic nature allowing for its secretion in breast milk. Codeine is metabolized in the liver by the Cytochrome P450 system to morphine to allow its pharmacological activity, some mothers and infants have an inherited defect in metabolism of codeine which can lead to sedating levels of morphine being present in breast milk.
- Low dose oral morphine or can be used safely however at higher dose, intravenous morphine should be used with caution and the **baby observed by an adult other than the mother, when opioids are use**
- If there is an in-patient stay, patients should have unrestricted access to their baby and responsible adult to continue breastfeeding, including overnight, but it should be made clear ward staff cannot assist with caring for the baby, a responsible adult should be with them at all times (other than the patient).
- Engorgement and Mastitis is a risk if breastfeeding is interrupted, patients should be encouraged to bring a breast pump with them if possible.

Breast feeding and Elective Surgery Flow Chart



Useful resource: National Institute of Health' LactMed database found at <http://toxnet.nlm.nih.gov/newtoxnet/lactmed> This peer-reviewed resource provides information regarding drugs transferred into breast milk, safe alternatives to commonly used medications

References

- 1) Cobb B, Liu R, Valentine E, et al. Breastfeeding after anesthesia: a review for anesthesia providers regarding the transfer of medications into breast milk. *Transl Perioper Pain Med.* 2015;1(2):1–7.
- 2) Reece-Stremtan S, Campos M, Kokajko L. ABM Clinical Protocol# 15: Analgesia and Anesthesia for the Breastfeeding Mother, Revised 2017. *Breastfeeding Medicine.* 2017 Nov 1;12(9):500-6.