Approved by Quality & Patient Care Committee
August 2018

POSTOPERATIVE CARE

This Local Operating Procedure is developed to guide safe clinical practice in Newborn Care Centre (NCC) at The Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this Local Operating Procedure.

1. AIM

- To provide appropriate care to the neonate after surgery

2. PATIENT

- Newborns

3. STAFF

- Medical and nursing staff

4. EQUIPMENT

- Open care bed, omnibed or humidicrib (checked and warmed)
- Monitoring equipment
- Resuscitation equipment – neopuff and suction
- Servo-N or VN500 ventilator (checked and set up)
- IV pumps as needed
- Stethoscope

5. CLINICAL PRACTICE

Procedure:

1. Medical and nursing staff to receive handover from anaesthetic team.
2. Check patient ID.
3. Review postoperative orders from surgeon.
4. Notify ward clerk of neonate's return from theatre.
5. Ask for assistance from at least one other registered nurse to transfer.
6. Prepare for transfer:
   - Nominated personnelle should include: Airway management, cables and lines and the neonate
   - Swap monitoring over to bedside monitors and move IV pumps to safe location
   - Remove any excess and unneccessary items to ensure smooth transfer
   - Ensure ventilator settings match settings on transport ventilator
7. Disconnect patient from transport ventilator and transfer patient to bed or crib.
8. Connect patient to bedside ventilator immediately.

NOTE: If patient is very unstable you may need to provide intermittent positive pressure ventilation during transfer using the neopuff or self inflating bag. Alternatively, the neonate may be connected to the ventilator while still in the transport crib.

9. Assess ventilation:
   - Observe neonate for chest rise and auscultate for breath sounds
   - Check ETT is securely taped at correct position

NOTE: If ETT is inserted in theatre – chest x-ray is required to confirm position after return to NCC.

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10. Attach all monitoring (set monitor alarm limits appropriately).
11. Perform baseline observations:
    - Axilla temperature
    - Heart rate
    - Blood pressure (cuff or zero arterial line as applicable)
    - Respiratory rate
    - Oxygen saturations
    - Capillary refill
    - Blood gas including blood glucose
12. Observe:
    - Respiratory effort and breath sounds
    - Colour and perfusion
    - Fontanelle
    - Skin integrity and oedema
    - Neurological state
13. All infants returning from operating theatre should be continuously monitored for 4 hours (24 hours after general anaesthetic).
14. Record hourly for the first 4 hours:
    - Temperature
    - Heart rate
    - Blood pressure (cuff or arterial)
    - Respiratory rate
    - Oxygen saturations
15. If clinically stable and not requiring respiratory support, ongoing observations every 4 hours for 12 hours (hourly recordings to continue for those remining on support).
16. Routine observations continue after this if observations have been within normal range.

NOTE:
- **Neonates with an epidural infusion require additional observations**
- **Neonates may return with a cuffed ETT (should be deflated if inflated on return)**

17. Attach inline suction to ETT. Suction as needed.
18. Attach skin temperature probe to neonate and adjust temperature as needed.
19. Insert gastric tube if not in situ. Leave on free drainage until commencement of feeds.
20. Take any required postoperative bloods.
21. Check the following:
    - Correct fluids are running at an adequate rate and record hourly
    - Monitor fluid administration site as usual
22. Monitor urine output:
    - Urinary catheter in situ
        - Record output hourly for first 4 hours or as directed by the medical team then 4 hourly until catheter removed
    - No urinary catheter
        - Weigh nappy after each change
        - Record urine output in mL/kg/hour in fluid balance chart.
        - Notify medical team if urine output is <1mL/kg/hr or >5mL/kg/hr
23. Monitor chest and/or wound drains hourly for:
    - Output (volume, colour, consistency)
    - Swinging/bubbling
    - Suction level

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24. Monitor surgical and drain site(s) for:
    - Redness and/or swelling
    - State of dressing
    - Blood loss or ooze
25. Follow postoperative orders for care of the surgical dressing.
26. Calculate balance of input and output every 12 hours or as directed by the medical team.
27. Ensure adequate pain relief is prescribed and administered.
28. Monitor pain score hourly and prior to any intervention.
29. Optimise non-pharmacological interventions for pain:
    - Provide a quiet environment with dim lighting
    - Provide boundaries to support the neonate's position
    - Adhere to minimal handling principles
    - Use a pacifier if appropriate with parental consent
    - Use containment holding and positive touch
30. Check medication chart and anaesthetic charts for any medication administration (eg. antibiotics). Adminster any medications that are due if not already given.
31. Follow postoperative orders for specific instructions related to the surgery. Ensure handover and documentation of any critical information (eg. gastric tube **NOT** to be removed in case of oesophageal surgery).
32. Remove excess betadine (if used) from the skin once the neonate is stabilised.
33. Inform parents of:
    - Neonate's return to ward
    - Current care and condition
    - Surgical team to update parents on surgery and neonatal team to update parents daily about neonate's progress

6. DOCUMENTATION

- eMR
- Daily Care Plan
- Neonatal Observation Chart
- NICUS database

7. RELATED POLICIES/PROCEDURES/CLINICAL PRACTICE LOP

- Nil

8. RISK RATING

- Low

9. NATIONAL STANDARD

- Standard 1: Governance for Safety and Quality in Health Service Organisations
- Standard 4: Medication Safety
- Standard 5: Patient Identification and Procedure Matching
- Standard 6: Clinical Handover
- Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care

10. ABBREVIATIONS AND DEFINITIONS OF TERMS

NCC	Newborn Care Centre	IV	Intravenous
ECG	Electrocardiogram	ETT	Endotracheal tube

POSTOPERATIVE CARE cont'd

11. REFERENCES

- Browne, N., Flanigan, L., and McComiskey, C. (2012). Nursing Care of the Pediatric Surgical Patient. 3rd ed. Burlington, Vermont: Jones & Bartlett Learning.
- Gardner, S., Carter, B., Enzman-Hines, M., and Hernandez Merenstein, J. (2015). Merenstein & Gardner's handbook of neonatal intensive care. 8th ed. St. Louis, Missouri: Mosby Elsevier.

12. AUTHOR

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