

## REPLOGLE TUBE – SET-UP AND INSERTION

*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.*

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### INTRODUCTION

Continuous oesophageal pouch suction is used in the management of neonates with oesophageal atresia awaiting surgical repair. A double lumen Replogle suction catheter is placed into the oesophageal pouch to remove saliva and secretion to prevent aspiration or pneumonia.

#### 1. AIM

To guide the setting up and insertion of the Replogle tube safely

#### 2. PATIENT

Newborns

#### 3. STAFF

Medical and nursing staff

#### 4. EQUIPMENT

- Replogle suction catheter size FG 10
- Atrium Oasis Dry UWSD unit
- Suction regulator
- Suction tube
- Duoderm barrier film
- 3-way tap
- 5mL syringe
- Infusion burette and giving set
- 0.9% sodium chloride – 500mL
- Leukoplast (wide tape)
- Cavilon
- Neutral detergent



Picture 1

#### NOTES:

- A spare Replogle tube and taping is to be at the infant's bedside in case of accidental dislodgement.
- Infant is to be nursed with head elevated at 30°.
- If water runs out of the air outlet of the 3-way tap, the Replogle tube may be blocked. Inject 0.5mL – 1.0mL of air via the air outlet to unblock. If unsuccessful, change the replogle tube.
- Change 0.9% sodium chloride and giving-set every 48 hours.
- Change the Replogle tube and Atrium UWSD unit weekly. Document changes on Nursing Care Plan.

## REPLOGLE TUBE – SET-UP AND INSERTION cont'd

### 5. CLINICAL PRACTICE

#### Procedure:

1. Perform hand hygiene.
2. Collect equipment.
3. Clean working surface area with neutral detergent.
4. Attach suction regulator unit to wall outlet.
5. Set up Atrium UWSD unit. Attach section tube to unit.
6. Set suction control dial to **-25cm H<sub>2</sub>O** (as discussed at Surgical Team Meeting on 17 January 2014). Ensure water chamber is filled to 2cm line as per instructions.
7. Attach the infusion giving set to 500mL bag of 0.9% sodium chloride.

#### NOTE:

- Acetylcysteine is sometimes added to the sodium chloride solution to assist clearing of secretions in the pouch.

8. Connect infusion line to the 3-way tap. Prime the line.
9. Cut the Duoderm and Leukoplast to the required size. Stick on infant's face (Picture 2 & 3).
10. Perform hand hygiene. Use non-sterile gloves.
11. Place Duoderm to the cheeks after Cavilon is applied.



Picture 2



Picture 3

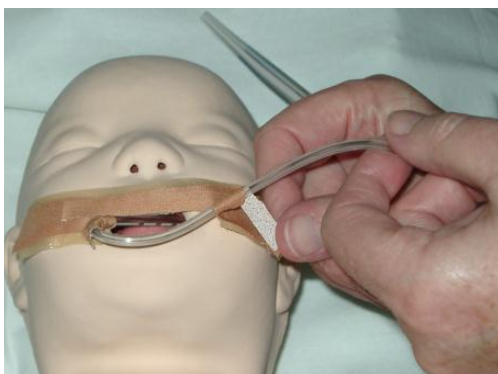
12. Gently insert the replogle tube via the oropharynx until resistance is met. Withdraw the tube by 0.5cm. Note the length and record in the patient's eMR.

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13. Secure the Replogle tube with Leukoplast (Picture 4).
14. Attach the infusion line with the 3-way tap to the blue connection of the Replogle tube.
15. Infuse 0.9% sodium chloride at 5mLs/hour rate via an infusion pump.
16. Attach the 5mL syringe to the remaining third port of the 3-way tap. Leave it open to air (Picture 5).



Picture 4



Picture 5

17. Connect the clear connection of the Replogle tube to the Atrium UWSD suction apparatus with suction tubing.
18. Turn on the suction unit to **-100mmHg** at the wall and ensure the Atrium suction control dial is set at **-25cm H<sub>2</sub>O**.
19. Position the infant in a comfortable posture with head end elevated.
20. Document procedure in eMR and record suction pressure, colour/consistency of the secretion and 0.9% sodium chloride infused hourly on the observation chart.

**6. DOCUMENTATION**

- eMR nursing notes
- Daily Care Plan
- Neonatal Observation Chart

**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 Organisation
- Standard 4 Medication Safety

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**10. ABBREVIATIONS AND DEFINITIONS OF TERMS**

NCC	Newborn Care Centre	UWSD	Under Water Sealed Drain
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**11. REFERENCES**

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- Holland AJA and Fitzgerald DA. 2010. Oesophageal atresia and tracheo-oesophageal fistula: current management strategies and complications. *Paediatric Respiratory Reviews.* 11, 100–107.
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**12. AUTHOR**

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**REVISION & APPROVAL HISTORY**

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