

**Royal Hospital for Women (RHW)  
NEONATAL BUSINESS RULE  
COVER SHEET**



**Health**  
South Eastern Sydney  
Local Health District

Ref: T24/31031

<b>NAME OF DOCUMENT</b>	Chest Drain – Set-up. Atrium Oasis Dry Suction Under-Water Seal Drainage (UWSD)
<b>TYPE OF DOCUMENT</b>	Clinical Business Rule
<b>DOCUMENT NUMBER</b>	RHW 039
<b>DATE OF PUBLICATION</b>	15.4.24
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<b>FORMER REFERENCE(S)</b>	Oasis Dry Suction Chest Drains, Instructions for Use. Atrium Medical Corporation, Hudson, New Hampshire 03051, USA.
<b>EXECUTIVE SPONSOR</b>	S Bolisetty (Medical Co-Director Newborn Care Centre); S Wise (Nursing Co-Director Newborn Care Centre)
<b>AUTHOR</b>	KB Lindrea (CNC), R Jackson (NE), E Jozsa (CNS)
<b>SUMMARY</b>	Assist nursing and medical staff to set up an Atrium Oasis dry suction chest drain system correctly.

# Royal Hospital for Women (RHW) NEONATAL BUSINESS RULE

## Chest Drain – Set-up. Atrium Oasis dry Suction Under-Water Seal Drainage (UWSD)

RHW CLIN039

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### 1. BACKGROUND

An Atrium Oasis dry suction underwater seal drainage (UWSD) system has a water seal, suction control, and drainage collection chamber. The system enables removal of air or fluid from the pleural cavity to restore air pressure and re-inflating a collapsed lung.

### 2. RESPONSIBILITIES

Medical and Nursing Staff

### 3. PROCEDURE

#### 3.1 Equipment

- Sterile field on a clean work surface
- Atrium Oasis dry Suction Chest Drain
- Suction tubing (if required)
- Wall suction regulator (Picture 7)
- Adhesive tape, scissors, safety pin
- Duoderm

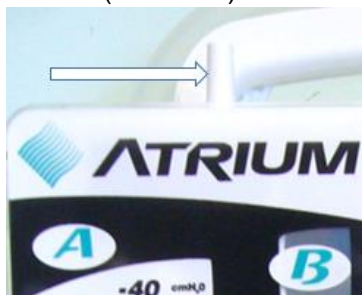
#### 3.2 Clinical Practice

##### 3.2.1 Setting up the Atrium Oasis drainage system

1. Open Atrium pack on sterile plastic drape.
2. Swing out the plastic arm attached to Atrium drain to stand the chamber upright.
3. Remove the pre-packaged sterile water ampoule that is attached to the back of drainage system.
4. Twist off the top of ampoule and attach to suction port (Picture 1).
5. Squeeze ampoule to fill the water seal chamber to the 2cm “fill” line (Picture 2).

##### 3.2.2 Setting the suction pressure

1. The suction pressure is pre-set at -20cm H<sub>2</sub>O that is recommended by the manufacturer.
2. If the medical team requests different setting adjust the pressure by turning the rotary suction control dial located on the left side of the drain (Picture 3), labelled A, on the drainage system (Picture 4).



Picture 1



Picture 2



Picture 3



Picture 4

#### NOTE:

- Do not change suction pressure setting unless prescribed by the medical team.

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### 3.2.3 Connecting drainage system to infant

1. Maintain sterility while passing the rubber opaque tubing to proceduralist to cut off the end. (Picture 5).
2. Connect the rubber opaque tubing to the chest drain (Picture 6).
3. Attach suction tubing from the wall suction regulator labelled Low Suction (Picture 7) to the suction port of Atrium Chest Drain System (Picture 8).



Picture 5



Picture 6



Picture 7

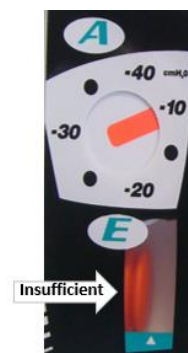


Picture 8

4. Turn on the wall suction with pressure set at a minimum of -100mmHg (13kPa).
5. Check the orange suction monitor bellow has extended to the delta mark (Picture 9).
6. Increase suction pressure at the wall if orange bellow is not at the delta mark (Picture 10).



Picture 9



Picture 10

**NOTE:**

- If desired suction is less than -20cm H<sub>2</sub>O, any visible expansion of the bellows into the window confirms that suction is operational.

7. Hang the Atrium drainage system from the infant's bed with the hooks attached to the chamber where possible (Picture 11).
8. Ensure the drainage system hangs below the level of the infant's chest.

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Picture 11

**NOTE:**

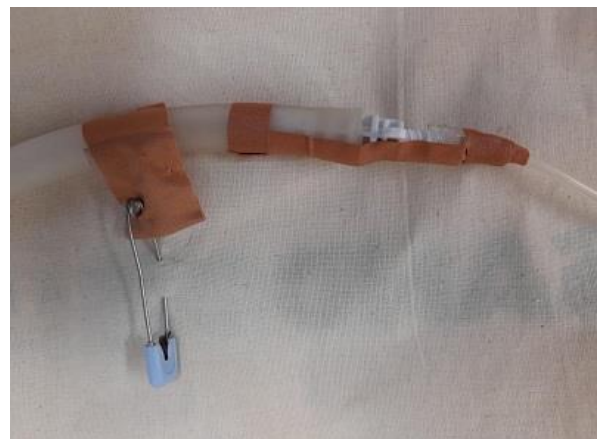
- Check surgical order for suction pressure when an infant returned from Operating Theatre.

### 3.2.4 Securing tubing and connection junction

1. Cut 3 pieces of adhesive tape with a courtesy tag for easy removal (Picture 13).
2. Attach the chest drain to the rubber drainage system tubing.
3. Attach one piece of adhesive tape to the rubber opaque tubing to the chest drain (Picture 14) and cover both ends with the remaining adhesive tape for easy visualisation of the connection (Picture 14).
4. Apply a piece of leukoplast around the rubber opaque tube and secure tubing to bed linen with a safety pin (Picture 14).



Picture 13



Picture 14

### 3.4 Abbreviations

UWSD	Under water seal drain		
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### 3.5 References

1. Oasis dry Suction Chest drains, Instruction for Use. Atrium Medical Corporation, Hudson, New Hampshire 03051, USA.
2. [Atrium Oasis Dry Suction Water Seal Chest Drain \(getinge.com\)](http://getinge.com) Accessed on the 14/03/2024.

### 3. RELATED BUSINESS RULES AND POLICY DOCUMENTS

- RHW NCC Medical CBR - Chest Drain – Insertion and Removal of Intercostal Catheter Using Safe-T-Centesis in Newborn Infants
- RHW NCC Medical CBR - Antisepsis in the Newborn Care Centre

### 4. CULTURAL SUPPORT

- When clinical risks are identified for an Aboriginal family, they may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.
- For a Culturally and Linguistically Diverse CALD family, notify the nominated cross-cultural health worker during Monday to Friday business hours.
- If the family is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017\_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

### 5. IMPLEMENTATION PLAN

This revised CBR will be distributed to all medical, nursing and midwifery staff via @health email. The CBR will be discussed at ward meetings, education and patient quality and safety meetings. Education will occur through in-services, open forum and local ward implementation strategies to address changes to practice. The staff are asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and understood the revised CBR. The CBR will be uploaded to the CBR tab on the intranet and staff are informed how to access.

### 6. RISK RATING

- Low

### 7. NATIONAL STANDARDS

- Standard 1 Clinical Governance
- Standard 3 Preventing and Controlling Infections
- Standard 5 Comprehensive Care
- Standard 6 Communicating for Safety
- Standard 8 Recognising and Responding to Acute Deterioration

### 8. REVISION AND APPROVAL HISTORY

24/08/2011	1	C. Moore (CNS)
10/2013	2	K. B. Lindrea (CNC), S. Bolisetty Med. Consultant) & J. Sheils (NE)
29/06/2018	3	KB Lindrea (CNC)
25/03/2024	4	KB Lindrea (CNC), R Jackson (NE), E Jozsa (CNS) – RHW NCC CBR Committee Endorsed BRGC 24.4.24