Paediatric Intensive Care Unit

Moving & mobilising with drains and lines

Staff relevant to:	Medical and Nursing staff caring for children in the PICU
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Related Guidelines and Policies:	
C41/2016	Chest Drain Insertion & Management UHL Children's Hospital Guideline
C11/2012	Chest Drain Insertion UHL Neonatal Guideline

Contents

1. Indications

All children (<18 years) who have chest drains or any vascular access devices (except implanted, e.g. Port-A-cath), should be managed in accordance with this policy which describes securement of chest drains and vascular devices aiming to prevent their accidental removal during moving or mobilisation of paediatric patients in paediatric intensive care units.

2. Underlying principles and purpose

Dislodgement of vascular device or chest drains is considered a patient safety risk with its consequences:

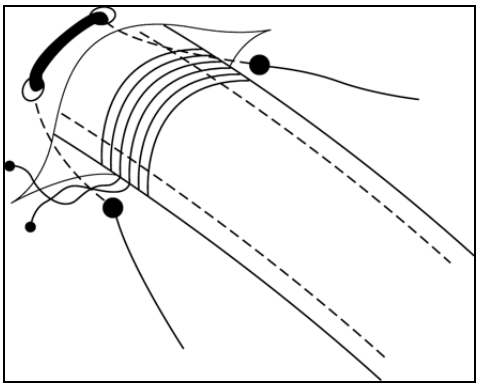
- patient anxiety & potential pain at reinsertion
- interruption or delay of treatment
- need to place a new device (increase of cost, extra staff time)
- loss of access site (the number of accessible veins in a body is limited)

Mobilisation or moving patients is one of the risk factors influencing accidental dislodgment of drains or vascular devices.

A. Risk assess for age and condition appropriate activities (see SPACE MISSION chart)
B. Check lines and drains securement. The lines/drains must be **secured at 2 points at the minimum** – at the insertion point and to the patient's body/limb, with an additional GripLock or a loop to prevent direct traction at the insertion point and accidental dislodgment. Incorrectly secured lines or drains which are in risk of dislodgement must be reviewed and re-secured before a patient is mobilised/ moved.
C. Plan the process in steps and explain it to all participants
D. Be aware of drugs affecting haemodynamics or breathing being delivered by infusion pumps – change of pump position can deliver a drug bolus (lifting a pump) or cease the delivery of the drug (lowering a pump) – that can lead to a line blockage (e.g.!!Vasoactive drugs, Prostin!!).
E. Personnel:
    - In a complex situation with multiple drains or lines, or in children with difficult access who are dependent on current iv device, at least 3 person technique is required for mobilisation/ moving out of a bed (3 professionals – e.g. nurses/therapist/other trained hospital staff).
    - In the situation where risk assessment allows, after ensuring the lines & drain(s) are secured as below, consider how many other lines/attachments are present and whether the patient can mobilise independently. If patient is able to mobilise independently and has only chest drain(s), 1 person mobility is appropriate.
    - If patient is non-mobile and has multiple lines/attachments, and they all are appropriately secured, 1 person is appropriate for age appropriate activity/movement.
    - Please see additional risk assessment from SPACE Guidance
F. Ask for help, if not sure. Make sure that medical team is in agreement with mobilisation/move plans.
G. In the situation of drain/line loss, please fill in Datix in order to identify learning and prevent the situation in the future.

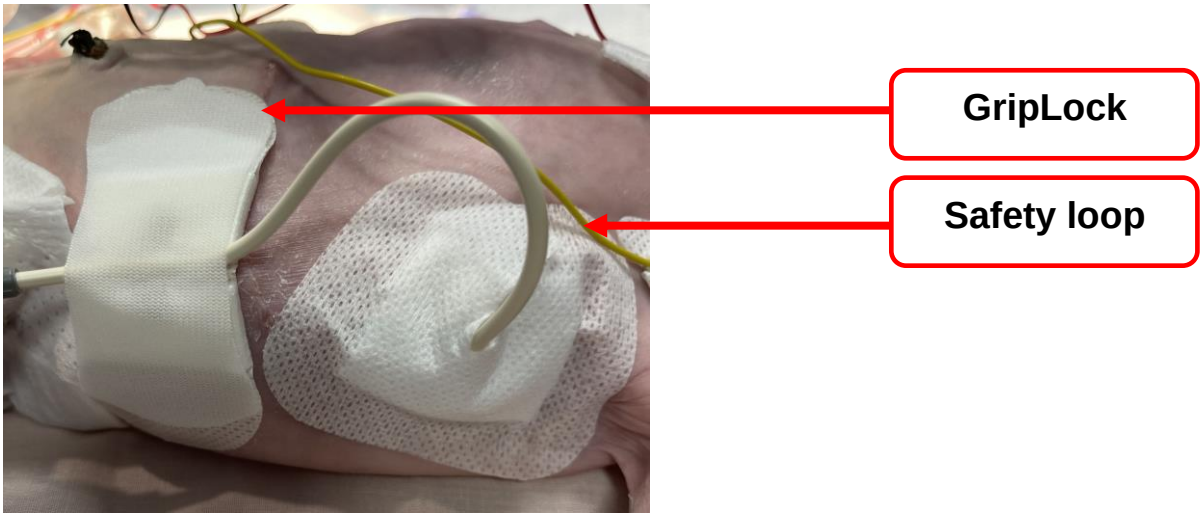
2.1 Mobilising with Chest drains

1. Chest drains must be either sutured or otherwise secured in place (securing device are in some of chest drain packs). The mode of securing should be documented. Common ways of securing include:
    - ☑ The tube is sutured in place with a 'stay 'suture and also a purse string suture applied

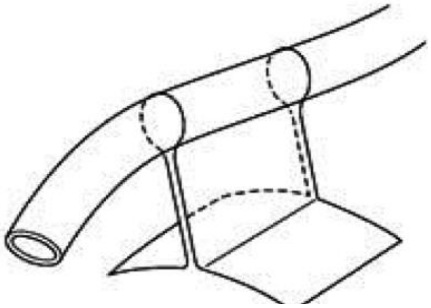


- ☑ Dressings and fixation devices; it is good practice, wherever possible to use transparent dressings to allow inspection of drain site without removal of dressing

2. An additional measure needs to be implemented to ensure that there is **no traction** on the drain to avoid displacement. This is especially **important in smaller children with pigtail drains.**
   - ☑ GripLock - in step 1. & 2. attach the drain/line to the GripLock;
   - ☑ in step 3. & 4. attach the GripLock to a skin



- **Omental tag** is an alternative to GripLock - a tape can allow the drain to lie a little away from chest wall to prevent tube kinking and tension at insertion site



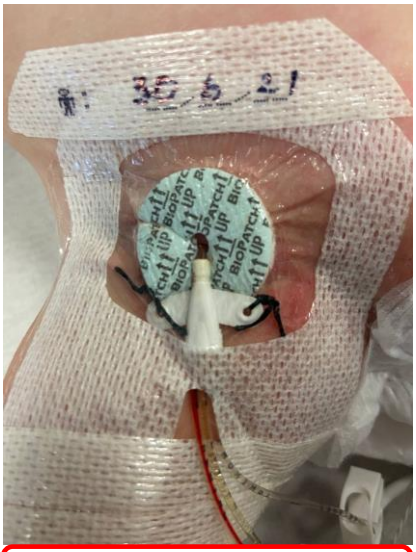
3. Mobilising/moving patients with chest drains

- Before mobilizing/moving patients check whether the chest drains are securely anchored to the patient' abdomen/side of the chest to reduce risk of traction and discomfort. **Pigtail drains require securing at 2 points at the minimum** – at the insertion point and to the patient's abdomen (or side of the chest) with an omental tape or GripLock. Incorrectly secured drains which are in risk of dislodgement must be reviewed and re-secured before the patient is mobilized/moved.
- Administer adequate pain management to achieve mobilization/move, coughing and deep inspiration
- Do not clamp the chest drain during mobilization/move, ensure the drain bottle remains below the level of the chest. Patients with a non-bubbling chest drain may be allowed to go off the ward with/or without nursing supervision, at the discretion of the primary team consultant. This decision should be recorded in the clinical record.

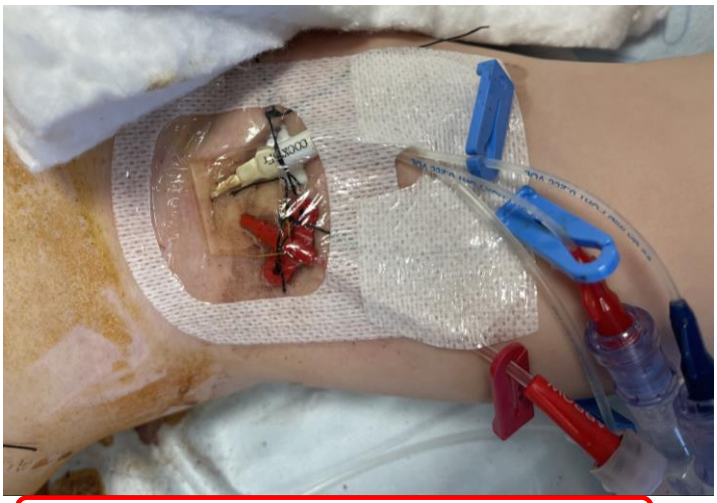
2.2 Moving/mobilising with vascular access

The lines must be **secured at 2 points at the minimum** – at the insertion point and to the patient's body/limb, with an additional GripLock or a loop to prevent direct traction at the insertion point and accidental dislodgment. Incorrectly secured lines which are in risk of dislodgement must be reviewed and re-secured before a patient is mobilised/ moved.

Central venous lines are usually sutured, and covered with clear dressing which has to be occlusive.



Dressing with Biopatch



Dressing with Chlorhexidine pad

Peripheral venous lines should be secured with steri-strips and covered with clear dressing. Splints are useful in the situation where lines are inserted in close proximity of joins. Additional coil and tape the line to the body/limb prevents direct traction at the insertion point.

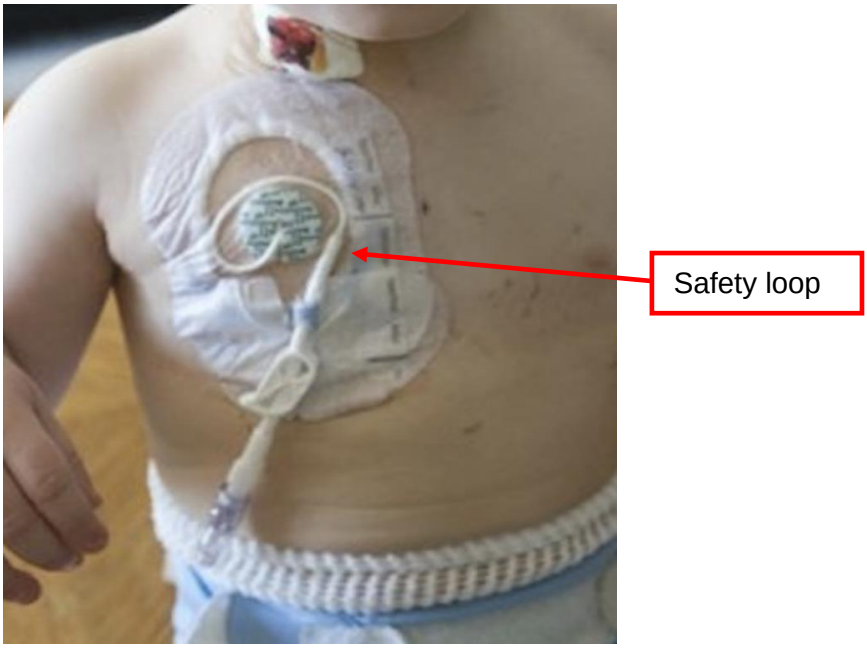
Occlusive dressing

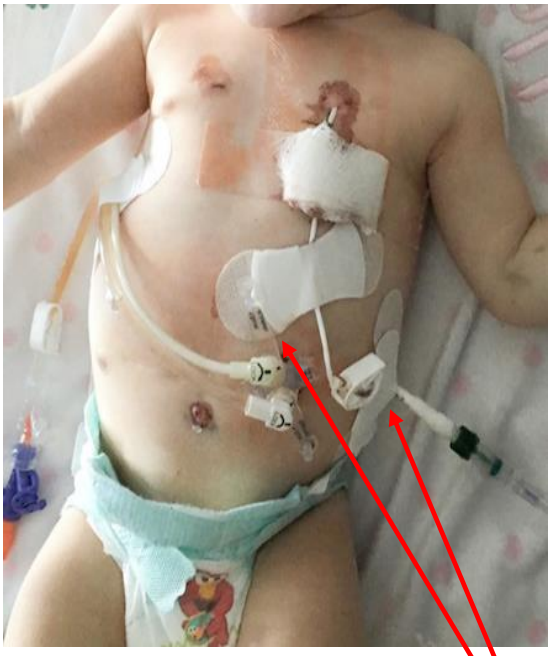
Splint & safety loop

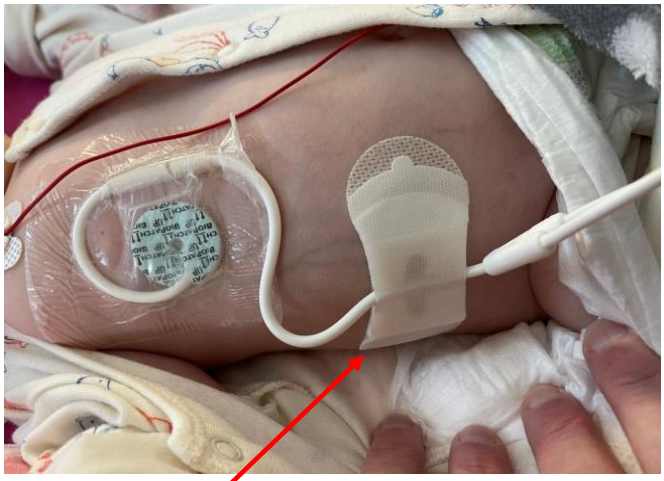
PICC line is usually secured with GripLock (rarely sutured) or other securement device, and covered with clear dressing. The dressing has to be occlusive. Before moving/mobilizing, apply an additional coil and tape the line to the body/limb to prevent direct traction at the insertion point.

Hickman line:
It is important that the initial dressing applied over the exit site in the operating theatre should remain in situ for 7days if possible, to allow the catheter cuff to become secure. The dressing on the neck

wound should be removed after 48 hours, leaving the steri-strips in situ until the wound has healed. Hickman line insertion point is covered with clear dressing. The dressing has to be occlusive.





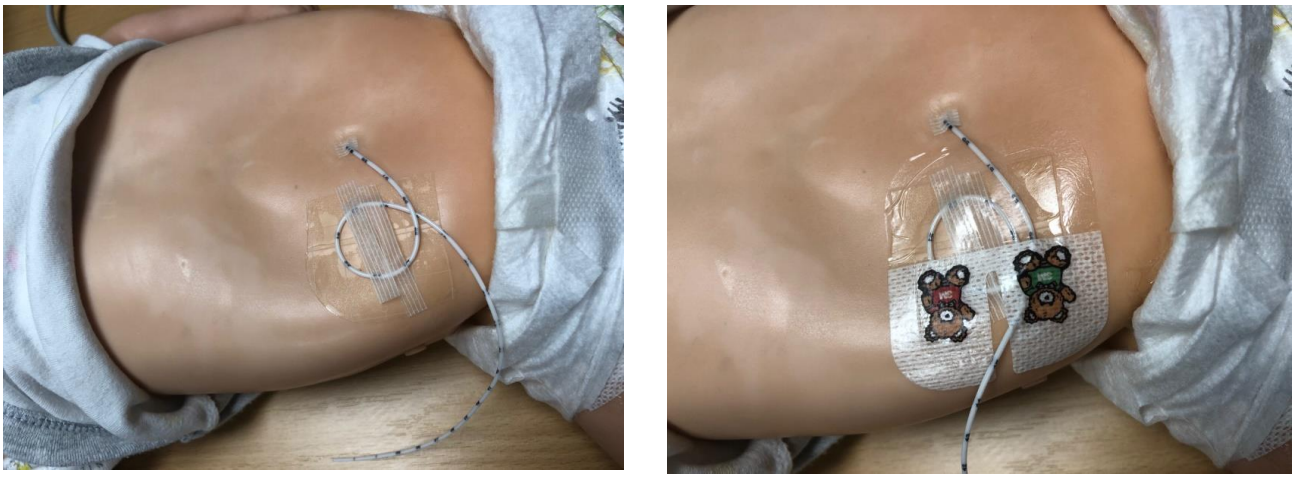


A line secured with additional GripLocks

Arterial line:
is usually secured with suture, and covered with clear dressing. The dressing has to be occlusive. Radial arterial line - a wrist should be supported with splint.

Umbilical lines:

1. Umbilical line must be sutured to the umbilical stump.
2. The second point of fixation – the line should be looped and covered to prevent traction on the insertion point.
   - ☑ Apply Duoderm on the skin
   - ☑ Coil the line and ensure that numbers are visible; secure the loop with steristrips and Tegaderm. Position the coil in the clear window. Overlap the Tegaderm at the entrance and exit of the catheter.



3. Education and Training

Training and raising awareness are on-going processes. On-going awareness is promoted through the induction and continuous bedside teaching. Training is provided for medical staff during lunchtime teaching (Wednesdays) and other sessions, and at junior doctors' induction training. Nursing education is supported by the Practice Development teams, and nursing educators.

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
This process will be monitored by collating where the procedure has not been followed, and discussed at appropriate meetings.	Datix incidents	PICU Consultants and senior Nurses	As it occurs	PICU clinical practice group

5. Supporting References

None

6. Key Words

Mobilising, moving, age appropriate activity, GripLock, drains securement, lines securement

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The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

Contact and review details	
Guideline Lead (Name and Title) Rakhee Mandalia –Clinical Specialist occupational therapist Julia Vujcikova - Consultant	**Executive Lead** **Chief Nurse**
Details of Changes made during review: **June 2023** **Corrected typo's. Changed complex situations require 3 people (previously 2)**	