

Nursing management of port catheters in a paediatric oncology unit

Background

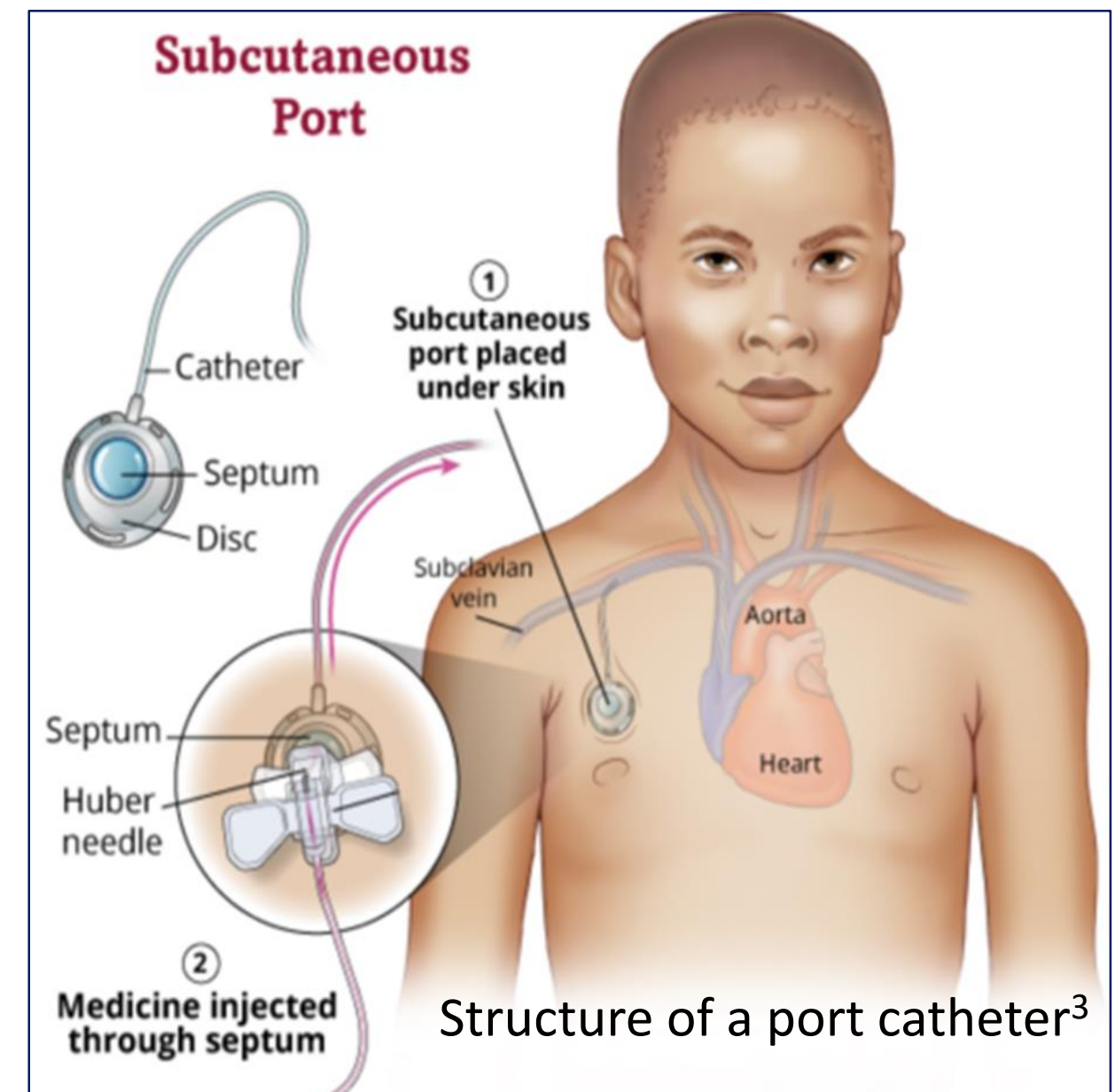
A port catheter is a central venous device implanted under the clavicle and into the subclavian vein. Ports are preferred in paediatric oncology due to ease of venous access, administration of chemotherapy, blood and blood products and other intravenous solutions¹.

Incorrect management of ports can lead to serious complications therefore specific nursing actions should be adhered to minimize these risks².

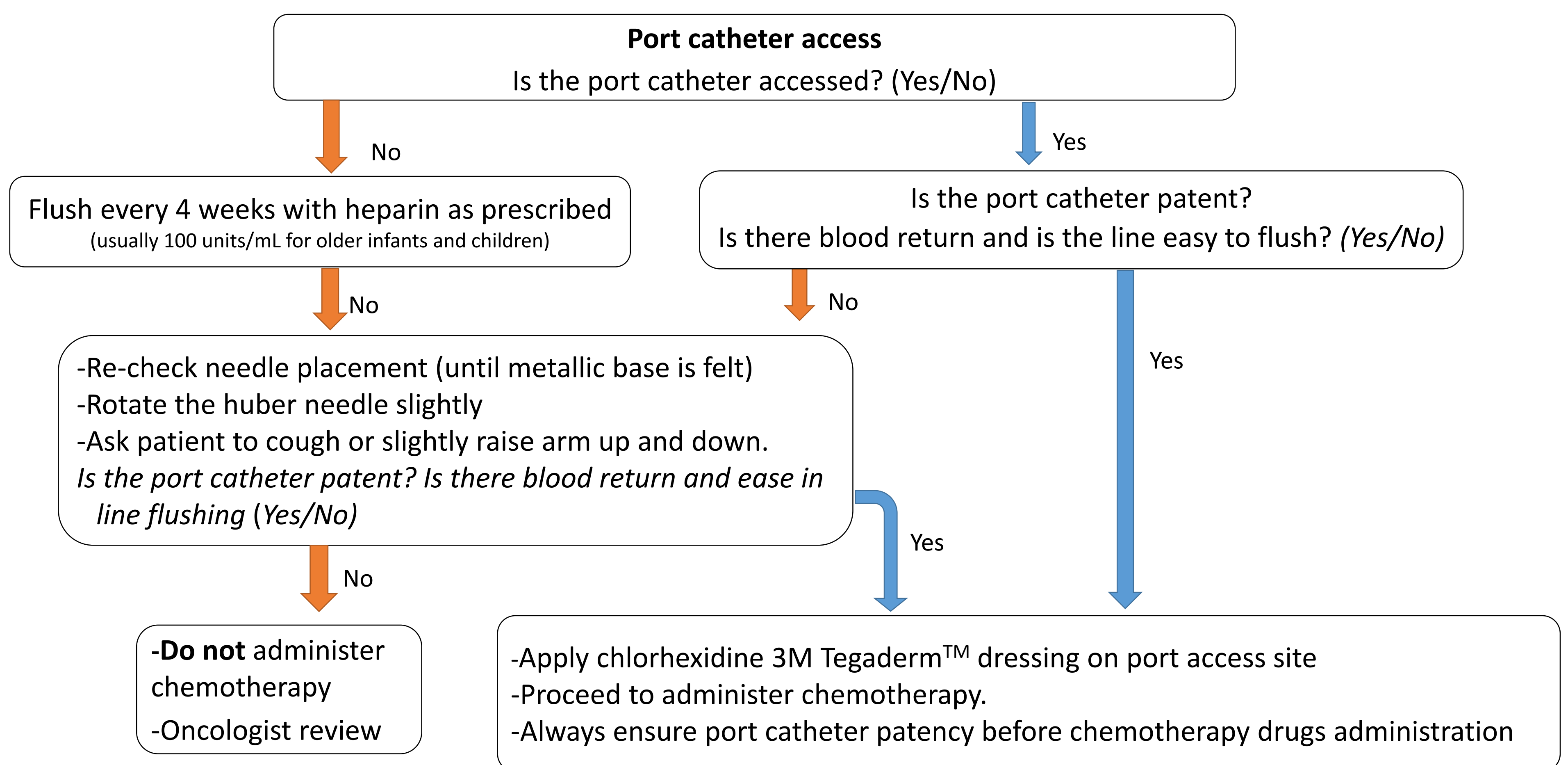
Purpose of the guideline

To develop an evidence-based practice guideline for nurses caring for children with accessed indwelling port catheters in Gertrude Children's hospital that will provide recommendations to ensure that the ports are managed correctly and the risk of infections and other complications minimized.

This guideline was developed through a topic-specific scope review to identify evidence relating to each aspect of care and the identification, appraisal and contextual adaptation of existing guidelines produced by international advanced nurse practitioners and professional societies.



Flow chart for nursing management of port catheters in paediatric oncology



General principles of port catheter care

- ✓ Always ensure port catheter patency before each chemotherapy drug administration
- ✓ Daily port catheter site assessment for discharge, bruising, bleeding or erythema
- ✓ Daily flushing with 10 mls normal saline [if no continuous infusion running]
- ✓ Change the non coring needle every 7 days if required for longer

Port catheter care bundles

Infection prevention

- Meticulous hand hygiene
- Personal protective equipment
- Aseptic non touch technique
- Use of 2% chlorhexidine solution for skin cleansing at site
- Use of needleless access ports
- Keep the line closed when not in use by correct use of stop cocks

Management of CLABSI

- Parallel blood cultures
- Regular blood cultures until no growth is obtained
- Start empiric antibiotics (as prescribed)
- Antimicrobial lock therapy (as prescribed)

Blood sample collection procedure

- First blood sample collected should be used for blood culture (if needed)
- "Discard (first sample) collection method" should be used
- Do not reuse blood draw syringes
- Flush line after blood draw

Complications: Catheter occlusion

- Attempt to clear occlusion by flushing
 - Do not administer chemotherapy if no blood return
- #### Catheter thrombosis
- Inform oncologist for radiological confirmation and prescription of thrombolytic medication

This flow chart is to be used in conjunction with the full evidence-based practice guideline (available from the author) and appropriate staff education and training.



References

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3. Together. St. Jude Children's Research Hospital. (2019). Subcutaneous Port [Image]. Retrieved September 14, 2019, from <https://together.stjude.org/en-us/diagnosis-treatment/procedures/central-venous-catheters/subcutaneous-port.html>

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