



Advice for District Nurses

Information on central venous catheters

Your patient had a tunnelled central venous catheter (Hickman[®] line) inserted on

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There is a small Dacron cuff on the part of the line which lies under the skin in the 'skin tunnel', between the clavicle and the exit site where the line comes out.

The cuff takes about three weeks to knit into the tissues under the skin. It helps to secure the line and also acts as a barrier to help prevent infection.

There may be two sutures in situ: one at the insertion site (this suture may be removed after one week) and one just below the clavicle. The second suture is at the exit site on the chest and should be removed after three weeks when the cuff has firmly knitted in.

Dressing

Formal dressings are required over the catheter exit site until after the sutures have been removed (three weeks). During this time the exit site should be cleaned using a solution of 2% Chlorhexidine Gluconate and 70% isopropyl alcohol e.g. Chloraprep[®].

Whilst the sutures are in place, the line must be dressed weekly or more frequently if the dressing becomes loose or soiled. During the first three weeks a strict aseptic technique must be used. The line must remain looped and firmly secured with a transparent, semi-permeable IV dressing e.g. IV 3000.

Once the sutures have been removed, formal sterile dressings are no longer required but the line must remain looped. Surgical tape is sufficient to support the line.

The patient is allowed to shower or bath as usual, however, showers are preferable. If bathing, please remind the patient to tape the line up and ensure that neither the hub nor exit site is submerged.

When continuous infusion pumps are running, the line does not need to be flushed. However, if no therapy is in progress, the line will need to be flushed with sterile saline 0.9% once every week whilst the patient is at home.

For routine flushing of tunnelled CVCs, aspirating blood first is NOT required.

Please note: All essential equipment will be provided for the first dressing/flushing of the line when patients are discharged from The Christie. Lines may be flushed and locked using Aseptic Non Touch Technique (ANTT) by practitioners who are trained in ANTT.

Procedure for flushing and locking a tunnelled central venous catheter (CVC) in the community

Equipment: (please note – all essential equipment will be provided for the first dressing/flushing of the line when patients are discharged from The Christie)

- Blue tray or sterile field e.g. dressing pack
 - Disposable apron
 - Non-sterile gloves
 - Bin
 - Alcogel
 - 3x2% chlorhexidine 70% alcohol wipes eg sani-cloth
 - 1x10ml posiflush or 1x10ml luer lock syringe, 1x10ml saline, 1xdrawing up needle, 1xbung
1. Clean hands with soap and water or alcogel using the six step technique. Dry.
 2. Put on apron.
 3. Clean blue tray using 2% chlorhexidine/70% alcohol wipe. Allow to air dry. Alternatively open sterile dressing pack.
 4. Assemble equipment in the tray using an Aseptic Non-Touch Technique (ANTT), protecting the key parts.
 5. If not using posiflush, draw up saline and place a bung on the syringe or carefully return to packet, protecting the key part. Place in tray.
 6. Clean hands and dry hands.
 7. Put on gloves and remove dressing and place in bin.
 8. Remove gloves and clean hands.
 9. Assess sites for signs of infection or thrombosis.
 10. Check the line is intact and the clamp is closed.
 11. Clean and dry hands and put on non-sterile gloves.
 12. Ensure the clamp is closed.
 13. Remove bung and place in bin.
 14. **Hold the line at all times to protect the key part.**
 15. Clean the hub of the line thoroughly with 3 parts of a 2% chlorhexidine 70% alcohol wipe, for a minimum of 15 seconds with 3 parts of the wipe. Place wipe in the bin.
 16. Allow hub to air dry.
 17. Attach 10 ml saline syringe.
 18. Open clamp.
 19. Flush using the push pause technique.
 20. The line must be clamped as the last ml is being administered.
 21. Dispose of syringe.
 22. If required clean the hub with a 2% chlorhexidine 70% alcohol wipe and allow to dry.
 23. Attach a clean bung to the hub.
 24. Redress line as appropriate.
 25. Dispose of any remaining waste appropriately.
 26. Clean blue tray or dispose of sterile field.
 27. Remove apron and gloves.
 28. Clean and dry hands.
 29. Complete all documentation.

For queries related to the care and management of the central line please contact the procedure team on **0161 446 3446**. For training on accessing and flushing central lines (Hickman[®] lines) contact clinicalskillsteam@christsite.nhs.uk call **0161 446 3796** or book directly via <https://www.eventbrite.co.uk/e/central-venous-catheters-training-tickets-19221811957>

Management of problems related to central venous catheters in the community

UNABLE TO ASPIRATE BLOOD?

Remove dressing and loop in line.
Open clamp and move its position.
Roll line between fingers where clamp has been moved.
Gently stretch line ensuring secured at exit site.
Ask patient to take deep breaths and/or cough and/or move arms up and down.

IF STILL UNABLE TO ASPIRATE BLOOD. PLEASE DO NOT PROCEED

Is the patient attending hospital in the next 7 days?

YES

NO

The line will be flushed at this appointment.
This is not a medical emergency

Refer to local oncology unit in office hours.
The catheter will be flushed, either at The Christie or in a local oncology unit.

Possible causes: Line tip against vessel wall
Fibrin sheath over the line tip
Misplacement of line tip /curled in skin tunnel
Thrombus

If there is evidence of pain/swelling in the neck or the arm, this could be due to a thrombus and prompt treatment is required. Please refer to relevant medical team at The Christie. An ultra-sound doppler of the vein will be performed.

SUSPECTED INFECTION

EXIT SITE/TUNNEL INFECTION

(Inflammation /soreness/pain/oozing at exit site)

Swab exit site for C&S. Refer to GP for oral antibiotics or relevant medical team at The Christie.
Monitor for signs of systemic infection (shivers, pyrexia, rigors)
If the patient is post chemotherapy 7-10 days, the patient may be neutropenic, please take a full blood count.

LINE SEPSIS – SYSTEMIC INFECTION

Shivering/ rigors/ pyrexia particularly when line has recently been accessed.

THIS IS A MEDICAL EMERGENCY
Contact The Christie Hotline
Tel: 0161 446 3658

DAMAGE TO LINE

Clamp the line or tie a knot above damage

Contact The Christie procedure team **0161 446 3916** (office hours) or The Christie Hotline on **0161 446 3658** out of hours

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

Contact The Christie Hotline for urgent support and specialist advice

**The Christie Hotline:
0161 446 3658**

Open 24 hours a day, 7 days a week

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact **patient.information@christie.nhs.uk**

For more information about The Christie and our services, please visit **www.christie.nhs.uk** or visit the cancer information centres at Withington, Oldham or Salford.

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