



Peripherally Inserted Central Catheter Line

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PICC lines and central lines allow patients to receive medication or nutrition without staying in a hospital. Some of these lines can be left in place for several months.

A tunneled dialysis catheter (TDC) is a dialysis access option for people who need dialysis therapy and may not be able to have a fistula or graft placed. The TDC can be used as soon as correct placement is confirmed. Sometimes people use a TDC temporarily while they wait for a fistula or graft to mature.

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Why It's Done

PICC LINES AND CENTRAL LINES CAN ADMINISTER:

- Antibiotics that must be taken through a vein over a period of time.
- Chemotherapy.
- Total parenteral nutrition (TPN) if you are unable to absorb food through your gastrointestinal system and need to be fed through a vein.

TUNNELED DIALYSIS CATHETERS ARE USED FOR:

- Hemodialysis for kidney disease.

Description

Although each of these catheters has different characteristics, they all require a sterile environment for placement.

- A PICC line or central line can be placed in an exam or hospital room.
 - PICC lines are positioned in the upper arm.
 - A central line is positioned in the neck and around the collarbone, or occasionally in the groin.
- A tunneled dialysis catheter (TDC) needs to be placed in a room where a fluoroscopy test can be done. It is positioned under the skin in the neck and around the collarbone, or occasionally in the groin.

The procedure takes about 1–1½ hours.

- An ultrasound test is usually done to identify the most suitable vein.
- The insertion site is cleaned. Numbing medicine is administered where the vein will be accessed.
- A small micro-puncture needle is used to enter the vein. A guide wire is then passed through the needle into the vein. The line or catheter is then inserted over the wire. The wire is then removed.
- An X-ray or fluoroscopy image is taken to confirm correct tip placement before the catheter is secured.

Risks

Possible complications from a PICC line include:

- Infection.

Possible complications from a central line include:

- Infection.
- Collapsed lung (pneumothorax), which can occur at the time of insertion.

Possible complications from a tunneled dialysis catheter (TDC) include:

- Infection.
- A blood clot (thrombosis) that forms in the catheter and prevents or limits blood flow.
- A blood clot (central venous occlusion) that can block the large vessels in the chest and can cause chest and neck swelling.
 - Often this can be corrected with a balloon angioplasty administered through the vein. A balloon device is slowly inflated inside the blocked portion of the vein to re-open the vessel and restore blood flow.

- Sometimes “clot busting” medications called thrombolytics are used with the balloon angioplasty to correct the blockage.
- The catheter can become dislodged or kinked.
- Collapsed lung (pneumothorax), which can occur at the time of insertion.

CALL YOUR HEALTH CARE PROVIDER IF YOU DEVELOP ANY OF THE FOLLOWING SYMPTOMS:

- Temperature greater than 101.5.
- Shakes or chills.
- Chest pain.
- Shortness of breath.
- Drainage from the insertion site.

How to Prepare

You may be asked to discontinue certain blood-thinning medications before the procedure.

What Can I Expect After Treatment?

- You may have some discomfort where the line or catheter is placed. This should resolve within a few days.
- It is important to keep the area around the access site for the catheter dry and clean. You should wash your hands before directly touching the line or catheter.
- **Call your health care provider if you develop any of the following symptoms: temperature great than 101.5, shakes or chills, chest pain, shortness of breath, drainage from the insertion site.**