Catheters & Ports in Cancer Treatment

What are catheters and ports?
Catheters are long, narrow, hollow tubes made of soft plastic that are inserted into a vein. Your health care team uses them to give medications, blood transfusions, or fluids. They are also used to take samples of blood for testing. Treatments are given through a small device connected to the catheter. Your doctor may put a catheter completely under the skin. If so, it is connected to a small plastic or metal disc called a port. The entire device is called a port-o-cath (pictured at right). A port may remain in place for years, if necessary.

What are the types of catheters?
The peripheral venous catheter (PVC) is the most common type. It is a short catheter, typically inserted into a vein in the arm or hand. It stays in place no longer than 3 days. A peripherally inserted central catheter (PICC) is inserted into a large vein near your elbow. A central line is inserted into a large vein under your collarbone or in your neck. After insertion into the vein, the tip of the catheter is moved through the vein until it reaches one of the large central veins in the chest. The exit is where your doctor gives you medication. A PICC or central line may remain in place for weeks or months.

How does a catheter or port help me?
Both catheters and ports reduce the number of times you need to be stuck with a needle. They also allow more than 1 type of treatment or medication to be given at a time. Catheters decrease the risk of tissue and muscle damage that can occur if some types of chemotherapy leak outside a vein, prevent excessive bruising or bleeding in patients with bleeding problems, and allow some treatments to be given at home.

How do I take care of a catheter or port?
Taking good care of a catheter or port reduces the risk of developing side effects such as infections, blockages or clots, kinks under the skin, and movement of the catheter. For catheters with tips that remain outside the body, you must take special care of the tube and the skin surrounding the area where the tube exits the body. In addition, these catheters must be flushed with sterile fluid each day to prevent blockage. A care service can help with this until you are comfortable doing it yourself. Ports require less care because they are located completely under the skin. A port may still need to be flushed so it does not get blocked. Ask your health care team for specific instructions about how to care for your catheter or port.

What are the signs of problems with a catheter or port?
Contact your health care team immediately if the area around the catheter or port becomes red, swollen, painful, bruised, or warm; there is excess bleeding from the insertion area; you develop a fever; you have shortness of breath or dizziness; the fluid leaks; the catheter tube outside of your body gets longer; or the catheter seems blocked.

ASCO ANSWERS is a collection of oncologist-approved patient education materials developed by the American Society of Clinical Oncology (ASCO) for people with cancer and their caregivers.
Questions to ask the health care team

Regular communication is important in making informed decisions about your health care. It can be helpful to bring someone along to your appointments to take notes. Consider asking your health care team the following questions:

- Why are you recommending a catheter or port?
- What are the risks and benefits of a catheter or port?
- Will my health insurance cover the costs associated with inserting a catheter or port?
- Will I receive anesthesia when the catheter or port is inserted? If so, which type?
- How long will the procedure take? How long will I need to stay in the hospital?
- How long will the catheter or port be left in place?
- How should I care for my catheter or port?
- Can I wear regular clothes, bathe, swim, or exercise with my catheter or port?
- What are the signs of a problem with my catheter or port?
- If I have problems with my catheter or port, who should I call?

For a digital list of questions, download Cancer.Net’s free mobile app at www.cancer.net/app.

Words to know

- **Anesthesia**: Medication to block the awareness of pain.
- **Bolus**: A dose of a substance given by rapid intravenous infusion in 2 to 3 minutes or less; also called an IV push.
- **Chemotherapy**: The use of drugs to destroy cancer cells.
- **Continuous infusion**: Intravenous treatment delivered over a specific time without interruption.
- **Displacement**: A shift in the position of a catheter.
- **Infiltration**: A complication when intravenous fluid or medication enters the tissue surrounding the catheter, rather than entering the vein; also called extravasation.
- **Infusion**: The process of delivering a substance into a vein.
- **Infusion pump**: A medical device that delivers treatment intravenously in controlled amounts.
- **Intermittent infusion**: Intravenous treatment delivered only at certain times and used when a person does not need additional fluid.
- **Phlebitis**: Inflammation of a vein.