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. 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 the collarbone or in the neck. The tube goes under the skin from where it was inserted to where it leaves the body, usually in the upper chest. The exit is where your doctor gives you medication. A PVC or PICC line may remain in place for weeks or months.

What are the benefits of a catheter or port?
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 should 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 doctor 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; 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. 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?
- May I wear regular clothes, bathe or swim, or exercise with my catheter or port?
- What are signs of a problem with my catheter or port?
- Whom should I contact if I have problems with my catheter or port?
- Is there anything else I should be asking?

Find additional cancer treatment information at www.cancer.net/treatment. 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 intravenously; 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

Drip chamber: A device that regulates the flow of substances given intravenously and prevents air from entering the bloodstream

Infibration: 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

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