

Central Venous Port

I'm Dr Jonathan Salo, a GI Cancer Surgeon at the in Charlotte, North Carolina. These videos are designed to educate you about cancer and its treatment and help you and your cancer care team make the right decisions for you.

Of course, there is no substitute for the expert opinions of your cancer care team.

The topic of this video is methods for the intravenous administration of drugs

Most of the drugs used to treat cancer need to be administered in the veins(2)

There are three different methods which can be used to administer drugs intravenously:

The first is using a peripheral intravenous line or "IV" second is Peripherally inserted Central Catheter or "PICC" Third is a central venous port

A Peripheral intravenous line IV is placed through the skin into a vein in the hand or forearm before each dose or doses of chemotherapy or immunotherapy.

The catheter is removed the same day and then replaced when it's time for the next dose, which is typically one to three weeks later.

For patients who receive FLOT chemotherapy, a peripheral IV is not suitable because this treatment requires a 24-hour infusion of drug.

A peripherally inserted central venous catheter or PICC is similar to a peripheral IV but contains a long, thin tube.

A PiCC line can remain in place for weeks

A dressing is applied which is changed weekly

The dressing needs to be kept dry and clean

A PICC line is suitable for FLOT chemotherapy

A Central venous port is an implanted device for the administration of IV drugs

It contains a small chamber with a flexible rubber top and a tube that goes into the veins near the heart

When it comes time to administer drugs, a needle is passed through the skin into the chamber
This avoids having to find a vein underneath the skin in the arm or hand. The port is ideal for those with small veins which might be difficult to access with a peripheral intravenous line
Surgically placed under the skin
Drugs are injected into the reservoir, and the a tubing is placed into a vein
The port delivers drugs into the main vein near the heart
Suitable for FLOT (which requires a 24-hour infusion)
When it's time for administration of drugs
The skin is numbed with an anesthetic cream
A needle is inserted through the skin into the port reservoir
Needle is then removed after the dose is finished.
It is completely implanted under the skin
It is usually placed below the collar bone
Placed by radiologist or surgeon
Can be combined with other surgical procedures
such as laparoscopy or feeding tube placement
Port placement is done as an outpatient under a general anesthetic or sedation
Incisions are made above the collarbone and a small incision in the neck
The skin is closed with sutures that dissolve on their own and don't need to be removed.
Dermabond, or "superglue" is used over the incisions, so no dressing is required.
Because of the need for anesthesia or sedation, no driving is allowed the day of surgery.
You can shower the following day
We recommend no lifting for the first week to avoid bruising in the area
The main serious complication of a port placement is infection. This is extremely rare
However, if you develop fevers or redness or drainage from the incision, it is important to contact your surgeon immediately.
Infections are treated with antibiotics, but in some cases the port will need to be removed.
A hematoma is a blood clot under the skin at the surgical site.
In some cases this may require surgery to remove the clotted blood.

VENous thrombosis is clotting of the vein in which the catheter is placed.

This can cause swelling of the neck or arm

Treatment is usually with blood thinners and may require removal of the port

1 Malfunction

Ordinarily, there is easy flow through the catheter.

If there is poor flow through the catheter, this may require attention

IN some cases this is due to a blood clot on the tip of the catheter which can be treated with drugs to dissolve the clot

In other cases the port will need to be replaced in the operating room

We hope you have found this video helpful. Here are links to some other videos.

Feel free to leave a comment or a question, or if you have suggestions for future videos.

If you or a family member have had an encounter with esophagectomy surgery, I would love to hear about your experience, so please take a minute to leave a comment below.

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