IV Infusion Therapy

IV (*intravenous*) infusion therapy is a type of treatment to deliver a liquid substance (*infusion*) directly into a vein. You may have IV infusion therapy to receive an infusion of:

- Fluids.
- Medicines.
- Nutrition.
- Chemotherapy. This is the use of medicines to stop or slow the growth of cancer cells.
- Blood or blood products.
- X-ray dye that is given before an imaging procedure, like an MRI or CT scan.

Tell a health care provider about:

- Any allergies you have.
- All medicines you are taking, including vitamins, herbs, eye drops, creams, and over-the-counter medicines.
- Any problems you or family members have had with anesthetic medicines or X-ray dyes.
- Any blood disorders you have.
- Any surgeries you have had.
- Any medical conditions you have.
- Whether you are pregnant or may be pregnant.
- Any history of IV drug use.
- Any history of health care providers not being able to find a vein for an IV or blood draw.

What are the risks?

Generally, this is a safe procedure. However, problems may occur, including:

- Pain.
- Bruising.
- Bleeding.
- Infection.
- Failure to place the catheter due to inability to find a vein.
- Leaking or blockage of the catheter (*infiltration*).
- Damage to blood vessels or nerves.
- Allergic reactions to medicines or dyes.
- A blood clot.

What happens before the procedure?

- Follow instructions from your health care provider about eating or drinking restrictions.
- Ask your health care provider about changing or stopping your regular medicines. This is especially important if you are taking diabetes medicines or blood thinners.
- Learn as much as you can about your treatment. Ask your health care provider for reliable resources, such as websites, books, videos, and people, to help you learn about the treatment you will be having.

What happens during the procedure?

IV infusion therapy starts with a procedure to place a small, thin tube (*catheter*) into a vein. An IV tube will be attached to the catheter to allow the infusion to flow into your bloodstream.

Your catheter may be placed:

- Into a vein that is usually in the elbow, forearm, or back of the hand (*peripheral IV catheter*). This type of catheter may need to be inserted into a vein each time you get an infusion.
- Into a vein near your elbow (*midline catheter* or *PICC*). This type of catheter may stay in place for weeks or months at a time so you can receive repeated infusions through it.
- Into a vein near your neck that leads to your heart (*non-tunneled catheter*). This type of catheter is only used for short amounts of time because it can cause infection.
- Through the skin of your chest and into a large vein that leads to your heart (*tunneled catheter*). This type of catheter may stay in your body for months or years.
- So that it connects to an implanted port. An implanted port is a device that is surgically inserted under the skin of the chest to provide long-term IV access. The catheter will connect the port to a large vein in the chest or upper arm.
 - A port may be kept in place for many months or years.
 - Each time you have an infusion, a needle will be inserted through your skin to connect the catheter to the port.





After your catheter is placed, your health care team will lower your risk of infection by:

- Washing or sanitizing their hands.
- Cleaning the IV site with a germ-killing (*antiseptic*) solution.

To start the infusion, your health care provider will:

- Attach the IV tubing to your catheter.
- Use a tape or an adhesive bandage (*dressing*) to hold the catheter and tubing in place against your skin.
- Use an IV pump to control the flow of the IV infusion, if needed.

During the infusion, your health care provider will check the area to make sure:

- There is no swelling.
- Your IV infusion is flowing through the catheter properly.

After the infusion, your health care provider will:

- Remove the dressing or tape.
- Disconnect the tubing from the catheter.
- Remove the catheter, if you have a peripheral IV.
- Apply pressure over the IV insertion site to stop bleeding, then cover the area with a bandage (*dressing*).

If you have an implanted port, PICC, non-tunneled, or tunneled catheter, your health care team may leave the catheter in place. This depends on your treatment, your medical condition, and what type of catheter you have.

The procedure may vary among health care providers and hospitals.

What can I expect after the procedure?

Your blood pressure, heart rate, breathing rate, and blood oxygen level may be monitored.

Follow these instructions at home:

- Take over-the-counter and prescription medicines only as told by your health care provider.
- Change or remove any dressings only as told by your health care provider.
- Return to your normal activities as told by your health care provider. Ask your health care provider what activities are safe for you.
- **Do not** take baths, swim, or use a hot tub until your health care provider approves. Ask your health care provider if you may take showers.
- Check your IV insertion site every day for signs of infection. Check for:
 - Redness, swelling, or pain.
 - Fluid or blood. If fluid or blood drains from your IV site, use your hands to press down firmly on the area for a minute or two. Doing this should stop the bleeding.
 - Warmth.
 - Pus or a bad smell.
- Keep all follow-up visits as told by your health care provider. This is important.

Contact a health care provider if:

- You have signs of infection around your IV site.
- You have a fever or chills.
- You have fluid or blood coming from your IV site that does not stop after you apply pressure to the site.
- You have itchy skin.
- You have a rash.
- You have red, itchy, swollen patches of skin (*hives*).

Get help right away if:

- You have trouble breathing.
- You have chest pain.

These symptoms may represent a serious problem that is an emergency. Do not wait to see if the symptoms will go away. Get medical help right away. Call your local emergency services (911 in the U.S.). Do not drive yourself to the hospital.

Summary

- IV (*intravenous*) infusion therapy is a type of treatment to deliver a liquid substance (*infusion*) directly into a vein.
- Check your IV insertion site every day for signs of infection, such as redness or swelling.
- Change or remove bandages (*dressings*) only as told by your health care provider.
- Call your health care provider if you notice any signs of infection around your IV site or have reactions to your IV therapy.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

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