

Hypodermoclysis: A Way to Replace Lost Fluids



What is hypodermoclysis?

Hypodermoclysis (say: hi-po-dermo-cli-sis) is a way to replace lost fluids in the body. It is done when a person is too sick to drink enough water or eat enough food. A sick person might not be able to drink enough because of weakness, not wanting food or water, or if they have nausea, vomiting or a sore mouth. A person who is vomiting, sweating a lot, breathing very fast or having diarrhea can lose a lot of fluid. For these people, we might want to replace fluids with hypodermoclysis.

Why do our bodies need fluid?

Water is the main part of the human body. Almost 60 percent of our body weight is water. In order to be healthy, your body needs water just as it needs food. We lose water every day in two ways: by going to the bathroom (about 45 ounces a day) and by sweating and breathing (at least 21 ounces a day). We have to eat food and drink fluids every day to get the amount of water we need.

How can we replace fluids in sick people who can't eat and drink enough?

There are two ways to do this. The first way is to put the fluid right into a vein. This is called intravenous replacement, or IV replacement. The other way is to put the fluid under the skin. This is hypodermoclysis, or subcutaneous replacement.

To do hypodermoclysis, we put fluid into the tissue under the skin. This tissue is mostly fat. The blood vessels in the fat quickly take up the fluid.

If we do IV fluid replacement, we need doctors and nurses to watch the person very closely in a hospital. But a family member can do hypodermoclysis at home after one lesson from the doctor. Using hypodermoclysis, a family member can give the sick



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person about 90 ounces of fluid a day by giving 45 ounces of fluid in two different places.

How safe is hypodermoclysis?

This way of replacing fluids has been used safely for several decades. It is used most often in older people and in people with cancer. It is an easy way to replace fluids.

How does hypodermoclysis work?

A bag of fluid is connected to a plastic tube and to a long needle. The needle is put under the skin and taped in place. The needle place is usually on the chest, abdomen (belly) or thighs.

There is a drip chamber in the tube (like a little window) that shows the flow rate of the fluid. A roller clamp allows you to control the flow rate. The flow rate is how fast the fluid goes into the tube. Sugar and salt can also be put into the bag of fluid. A nurse or doctor should replace the needle every 4 to 7 days so the needle place will not get infected.

Your doctor will decide on the flow rate. Your doctor will show you how to fix the flow rate and tell you when to check it at home. You can ask your doctor for help if you have questions or problems.

The picture below shows a person having hypodermoclysis at home.

What are the common problems of hypodermoclysis and what should I do?

Hypodermoclysis is safe most of the time and does not have many problems. Here are a few problems that can happen during hypodermoclysis:

1. The flow rate changes or stops. Your doctor will show you how to control the flow rate by rolling the roller clamp.
 2. Swelling at the needle place. If you gently rub the needle place, the fluid will soak in better. Your doctor can show you how. Call your doctor for help if rubbing does not work.
 3. Pain at the needle place. Check the needle place for redness. If the skin around the needle place is red, ask your doctor for help. It may be time to use a new needle place.
 4. Blood in the tube. This means the needle has gone into a vein. You should call your doctor if this happens.
 5. The sick person has trouble breathing or is feeling much worse. Call your doctor.
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This handout provides a general overview on this topic and may not apply to everyone. To find out if this handout applies to you and to get more information on this subject, talk to your family doctor.

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