

Central Venous Catheter Placement

Your doctor will place this catheter in a large vein in your neck, upper chest, leg, or arm. These long, thin, hollow tubes are like the IVs placed in your arm except that they are placed in a bigger vein. Central venous catheters (central lines) may be helpful if we have trouble finding good veins in your arms.

There are common reasons for having a central catheter. They include:

- To give large amounts of fluid or blood quickly.
- To measure how much fluid your body needs.
- To give medicines through the veins for a week or longer.
- To give medicines that can only be given through large central veins.
- To take frequent blood samples without needle sticks.
- To give special nutrition when foods or liquids can't be given through the stomach or bowel.

Risks

Pain – Patients may feel a poke as the doctor inserts the needle. We use numbing medicine to lessen the pain. Once the needle is in, the pain is often mild and goes away.

Air in the catheter – Rarely, air enters the catheter while it is being placed. The air bubbles may travel into the lungs causing severe breathing problems.

Collapsed lung – The lung is very close to veins in the neck and chest. When a central line is placed in the chest, if a needle passes through or misses the vein, the needle could pierce the lung and cause it to collapse. If this happens, we will place a chest tube to re-inflate the lung. Rarely, a collapsed lung can result in death. This may happen even if everything is done the right way.

Infection – Any tube entering the body can make it easier for bacteria from the skin to get into the bloodstream. Special care in cleaning the skin and applying the dressing at the catheter site is done to decrease the risk of infection.

Bleeding – When the doctor inserts the needle, there is a risk of nicking a blood vessel. If this happens, the bleeding is often minor and stops on its own. Patients may notice a bruise. Rarely, the chest can fill with blood which could be life-threatening.

Clotting around the catheter – Blood clots can form in and around the catheter. If inside, they can plug up the catheter so that we can no longer use it. These clots can break off and travel through the bloodstream into the lungs. This could result in a serious breathing problem (pulmonary embolism).

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 8/2019 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6338