Radiologic Management of Central Venous Access

Venous access is a procedure in which a catheter is placed into a vein for medical diagnosis or therapy. The type of device used depends on the patient and the type of illness being treated. There are two main types of venous access devices: peripheral and central catheters. A peripheral catheter is usually placed into a small vein, often in the arm, and is usually used for up to 96 hours. A central catheter can be placed into a small or large vein in the body, with the tip located in a large vein close to the heart in the chest, and is used for a longer time.

There are different types of central venous catheters. These include peripherally inserted central catheters, temporary for short-term use, and tunneled for long-term use. Other devices, like a chest port, may also be put in the body. It is important to use proper hygiene and to monitor for bloodstream infections. If there is an infection, the device may need to be taken out and a new one placed in a different location, and antibiotics may be needed. Monitoring for a blood clot (https://www.radiologyinfo.org/en/info/bloodclot) is also important, and anticoagulant medication may be needed if one forms.

Typical uses for central venous access include giving nutrition and blood products. Chest ports are used to administer chemotherapy in people with cancer, to treat people having a sickle-cell crisis, or to treat patients with intravenous antibiotics for a blood infection.

For more information, see the Vascular Access Procedures (https://www.radiologyinfo.org/en/info/vasc_access) page.

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