

CVC Removal Considerations

Removal of a central venous catheter (CVC) is a procedure that should be undertaken with as much care and skill as CVC insertion and maintenance and by an experienced practitioner who has been assessed as competent to perform it. In addition, given the number and seriousness of complications associated with CVC removal (for example, air embolism, bleeding, dislodgement of thrombus, compression of brachial plexus), there should be sufficient rationale for the procedure.

A yes answer to any of the following questions would indicate a reason to consider removal of a CVC:

- Is there is an infection that is *proven* (that is, there are positive blood cultures from both the CVC and peripheral blood or a positive swab test result from the exit site) and *unresolved* (that is, cultures are still positive after appropriate antimicrobial therapy has been administered through the CVC for 48 hours)?
- Is there an infection that is compromising the patient?
- Is there a proven thrombosis in the patient's blood vessel?
- Is there an occlusion that remains after all appropriate methods of unblocking have been tried?
- Has a condition of phlebitis or thrombophlebitis developed that is unresponsive to treatment?
- Is there an irreparable fault or fracture in the CVC?
- Has the CVC exceeded its recommended dwell time *and* have the patient's venous access requirements been assessed to determine whether there are suitable veins for the length of therapy required and the patient is clinically stable for another CVC insertion?
- Does the risk of keeping a long-term access device in place at the end of treatment outweigh the patient's potential requirement for further central venous access in the next few days?
- Has the patient requested removal of the CVC?

Source: Drewett S. Central venous catheter removal: Procedures and rationale. *Brit J Nurs*. 2000;9(22):2304–2315. Accessed Jul 23, 2013.

http://anaesthesiaconference.kiev.ua/Downloads/Central%20venous%20catheter%20removal_2000.pdf.