



## Risk and Complication

1. Varies with different catheters and skin entry site, the more possible complications include:
  - 1.1 Bleeding at exit site (1-1.5%)
  - 1.2 Subcutaneous hematoma (0.6%)
  - 1.3 Catheter malposition (0.8%)
  - 1.4 Dislodged catheter (2.5-5%)
  - 1.5 Infection at exit site (2.8%).
  - 1.6 Venous thrombosis (0.5%)
  - 1.7 Air embolism (0.2%)
  - 1.8 Pulmonary embolism (0.3%)
  - 1.9 Pneumothorax (0.25%)
  - 1.10 Pneumothorax (0.5%)
  - 1.11 Anomalous arteriovenous fistula (rare but possible)
  - 1.12 Nerve injury (rare but possible)
  - 1.13 Central venous stenosis (3-50%)
2. Allergic reaction to intravenous contrast medium.
  - **Mild reactions:** For example, itching, mild skin rash, nausea, vomiting, feeling of warmth, arm pain, sneezing, coughing, and chest tightness. A few patients may experience delayed reactions usually within 24 hours, which include pain at injection site, itching, rash, painful or swollen salivary glands. The symptoms are usually transient, requiring minimal or no treatment.
  - **Moderate reactions:** These symptoms are more severe and last for longer duration. Patient may also experience rash or urticaria, fever and chills, an increase or decrease in blood pressure and palpitation. Specific treatment and close monitoring are required.
  - **Severe reactions:** The symptoms include shortness of breath, irregular heartbeat, chest pain, severe kidney failure, convulsion, and unconsciousness. If these symptoms occur, the patient will require urgent medical treatment.
  - **Death:** Contrast medium may cause severe allergic reaction and leading to death but it is extremely rare
3. Pain at injection site during injection of intravenous contrast medium. Contrast medium may accidentally leak out from the injection site into the soft tissue. Discomfort, swelling or pain may result. Generally, this should disappear within one or two days. Rarely, local skin necrosis has been known to occur as a late complication.

Should a complication occur, another life-saving procedure or treatment may be required immediately.

## Disclaimer

This leaflet only provides general information pertaining to this procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

## Reference

1. The Hong Kong Society of Interventional Radiology Limited, Patient Information Leaflet: Central Venous Access Catheters (CVAC) (2010)
2. Smart Patient Website by Hospital Authority: Percutaneous Venous Catheterization (2021)

<p><b>Patient's Label</b></p> <p>Patient Name: _____</p> <p>Hospital No: _____</p> <p>Episode No: _____</p>
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Signature of Patient: \_\_\_\_\_ Date: \_\_\_\_\_