1. **Overview**
   - A single or multi lumen catheter inserted directly into a large vein that is considered part of the central circulation e.g. internal jugular, subclavian and femoral veins.

2. **Goal of the Procedure**
   - To administer medication or fluids that are unable to be taken by mouth or would harm a smaller peripheral vein, obtain blood tests, and measure central venous pressure (CVP).

3. **Reference(s)**

4. **Required Reading / Review**
   - Chapter-4 Central Venous Catheters; Critical care medicine

To access the Clinical Key webpages listed below use the Direct Link Generator and use the second box on the page (below the OR) to put in the following URLs (one at a time) then click “show URL” to generate a link to the video and information (if the page does not display click on the generated link again)

- [https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_EM-092](https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_EM-092)
- [https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_EM-093](https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_EM-093)
- [https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_EM-094](https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_EM-094)
- [https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_AN-012](https://www.clinicalkey.com/#!/content/medical_procedure/19-s2.0-mp_AN-012)

5. **Required Procedure Competencies**
   - Assures that needed supplies are at bedside before beginning procedure.
   - Demonstrates positioning mannequin properly
     - Femoral: supine with leg extended and slightly abducted at the hip.
     - IJ: supine, slight Trendelenburg, head turned to opposite side
     - SC: supine, slight Trendelenburg, head turned to opposite side
   - Verbalizes need for cap, gown and gloves to be worn for procedure and adhering to surgical asepsis. (Only gloves need to be worn for purposes of simulation.)
   - Properly establishes a sterile field for the central catheter kit and patient.
   - Simulates sterile procedure for loading sterile water syringes
   - Begins procedure; may flush all lumens with sterile saline, and may cap or clamp all lumens except most distal one.
   - Simulates sterile procedure for draping patient.
   - Demonstrates sterile procedure for assembling ultrasound probe
   - Properly demonstrates using ultrasound probe to locate IJ. Verbalizes differentiation from carotid artery.
   - Completes internal jugular or subclavian central venous catheterization satisfactorily.
   - Properly sutures and secures catheter or verbalizes procedure if suturing not appropriate.
   - Attaches transparent dressing (verbalizes this step for simulation).
   - Disposes of all used materials appropriately, including sharps.
   - Confirms patient tolerated procedure, is comfortable and has no questions.
   - Orders post-procedure chest radiograph.