1. Overview
   - A thin catheter inserted into an artery.

2. Goal of the Procedure
   - It is most commonly used in intensive care medicine and anesthesia to monitor blood pressure directly and in real-time (rather than by intermittent and indirect measurement) and to obtain samples for arterial blood gas analysis.

3. Reference(s)

4. Required Reading / Review
   - Chapter-20 Arterial Puncture and Cannulation

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-055

5. Required Procedure Competencies
   - Performs screening measures for detecting ulnar collateral flow prior to radial artery cannulation, (verbalizes this step for simulation). (Allen Test).
   - Assures that needed supplies are at bedside.
   - Positions patient’s hand properly for radial artery cannulation.
   - Aseptic technique employed
   - Cannulates radial artery without instructor assistance.
   - Removes guide wire (if used) and needle and attaches catheter to transducer.
   - Properly sutures and secures catheter. Attaches transparent dressing (verbalizes this step for simulation).
   - Assess hand perfusion after catheter secured.
   - Assesses for proper waveform on bedside monitor. (verbalizes this step for simulation)
   - Disposes of all used materials appropriately, including sharps.
   - Confirms patient tolerated procedure, is comfortable and has no questions.