

Checklist for Abdominal Compartment Pressure Monitoring

- 1 litre NS
- 1 pressure tubing set with transducer & art line extension
- 30 ml luer lock syringe
- Kelly clamp
- Non-sterile gloves

Procedure:

- Hand hygiene and don non-sterile gloves
- Prime pressure tubing with normal saline
- Maintain aseptic technique and connect a luer-lock needleless access cap to the sampling port on the extension tubing
- Connect a 30 mL luer-lock syringe to the needleless access cap
- Level and zero transducer to mid axillary line with **patient in supine position** and **HOB flat** (to approximate level of bladder)
- Scrub the hub of the sampling port on the urinary drainage tubing with 2% chlorhexidine and 70% alcohol swab and allow 1 minute dry time.
- Connect pressure tubing to the sampling port after the prep has fully dried (connection before prep has dried will make it difficult to disconnect)
- Ensure that bladder is empty, then clamp the drainage collection tubing with a Kelly clamp (as shown in picture)
- Turn stopcock on extension tubing "off" to the patient and open the normal saline roller clamp
- Pull flush tag and fill the syringe with 25 ml normal saline (avoid air bubbles which will dampen waveform)
- Turn stopcock on extension tubing "off" toward the transducer and instill 25 ml of saline into the bladder
- Turn stopcock "off" to syringe"
- Observe waveform for baseline fasciculations and variability with breathing
- Wait 60 seconds before measuring pressure (to allow bladder muscles time to relax after instillation of saline)
- Place hand on patients abdomen to assess; muscles should be relaxed when measuring pressure
- Record the pressure at **end of expiration (print waveform and identify pressure)**
- When finished, disconnect the pressure tubing and place a sterile disinfecting tip on the end of the pressure tubing and sterile disinfecting cap on the needleless access port of the sampling port of the urinary drainage tubing. Maintain aseptic technique at all times to prevent bladder contamination.
- Remove Kelly clamp and observe for drainage of saline
- Remove gloves and perform hand hygiene
- Document pressures on graphic record and report pressure > 12 mmHg to resident
- When pressure monitoring is indicated, reassess Q4 H (if > 12) or Q6H until discontinued
- Patient does not require deep sedation or neuromuscular blockade for initial pressure measurement. If the intra-abdominal pressure reading is elevated, a bolus dose of sedation or neuromuscular blockade may be ordered to validate the pressure/rule-out muscle contraction artifact