

Abdominal Compartment Pressure Monitoring with 2-way Foley Catheter: Quick Steps

Equipment:

- 1 litre normal saline
- 1 pressure tubing set with transducer and art line extension
- 1 Kelly clamp
- 1 red blunt needle
- 60cc luer lock syringe

Procedure:

- Prime pressure tubing with NS
- Level transducer with bladder (mid axillary line in supine position)
- Connect red blunt needle to end of pressure tubing, cleanse sampling port with chlorhexidine swab and insert needle into sampling port of bladder collection tubing
- Clamp catheter drainage tubing with Kelly clamp
- Fill a 60ml luer lock syringe with 25ml normal saline and inject into bladder via sampling port
- Turn stopcock "off" toward syringe (open between catheter and transducer) to obtain waveform
- Adjust scale according to pressure reading
- Monitor q2-4 hrs.

Normal Values

- ✓ Normal intra-abdominal pressure is 0 - 5 mmHg.
- ✓ Pressures > 13 mmHg may be sufficient to restrict perfusion to the organs of the gut.
- ✓ If the abdominal compartment pressures is between 16-25 mmHg, hypovolemic volume expansion therapy can be used to maintain the perfusion pressure gradient for the abdominal organs.
- ✓ When compartment pressures exceed 25 mmHg, decompression surgery should be considered to prevent organ damage.
- ✓ Pressure may rise rapidly with active bleeding. Edema (which occurs with any ischemic insult) will generally result in a later rise in the pressure (27 hours or more post insult).