

**VANDERBILT UNIVERSITY MEDICAL CENTER
DIVISION OF TRAUMA AND SURGICAL CRITICAL CARE**

Intra-abdominal Hypertension and Abdominal Compartment Syndrome – Revised 2/2014

Definitions:

Intra-abdominal Pressure (IAP): Pressure within the abdominal cavity. Can increase with several conditions; such as the following:

- Severe sepsis/shock
- Large volume resuscitation in the operating room (>4L)
- Coagulopathy requiring large blood transfusion in the operating room
- Large ventral hernia repair
- Abdominal trauma
- Core hypothermia
- Mechanical ventilation with PEEP >10
- Mesenteric ischemia
- Intractable intracranial hypertension (ICP >20 despite medical management)

Abdominal compartment syndrome (ACS): IAP>20mmHg and new organ dysfunction

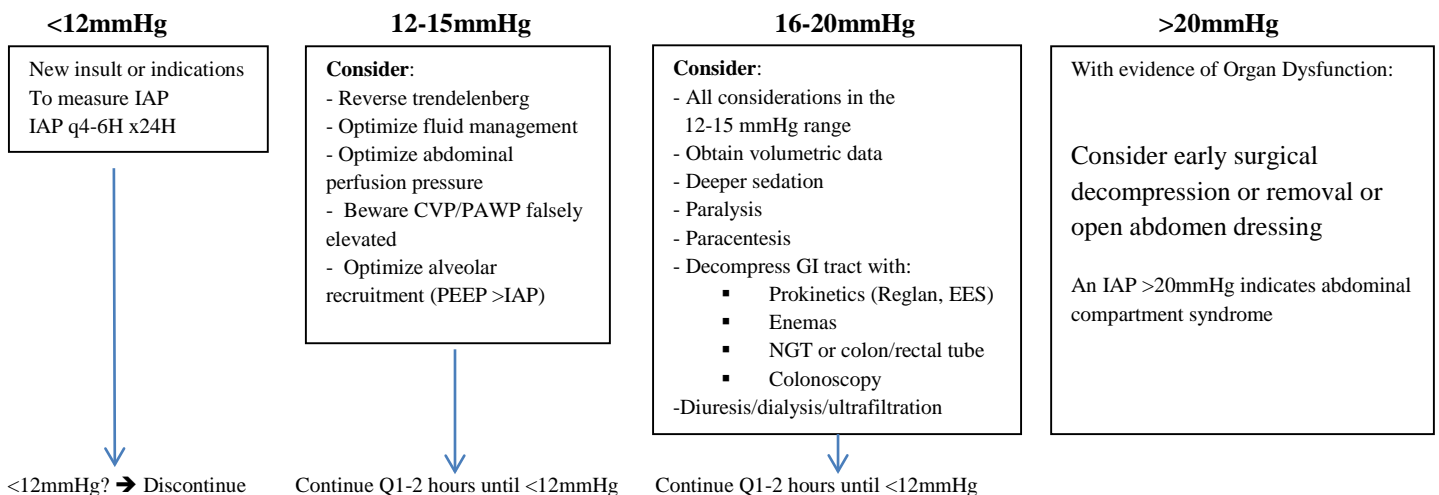
Method:

Bladder pressure measured with fluid infused into a urinary catheter via closed pressure system administered by bedside RN; mmHg measurement relayed to telemetry monitor in a waveform. Measuring IAP is only accurate on non-spontaneously breathing patients.

Consider measuring IAP in:

- Use of massive transfusion
- Severe sepsis/shock requiring >4L fluid
- Large ventral hernia repair including closure of open abdomen
- Damage control laparotomy/open abdomen
- Intractable intracranial hypertension ICP >20

Patient meets criteria for measurement/or is requested by primary surgical team. Follow this algorithm and measure q1-2 hours



References:

- Malbrain, et al. Intensive Care Med (2006): 32: 1722-1732
- Cheatham, et al. Intensive Care Med (2007): 33: 951-962
- Ivatury, et al. Adominal Compartment Syndrome. 2006
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