INTRA-ABDOMINAL HYPERTENSION (IAH) ASSESSMENT ALGORITHM

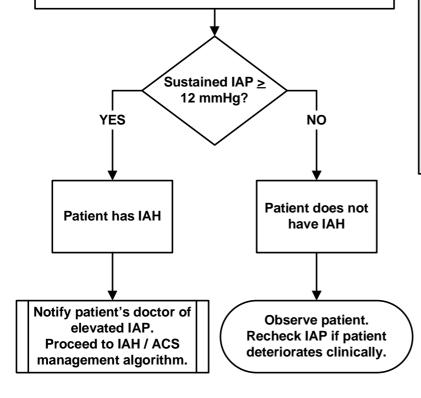
- Patients should be screened for IAH/ACS risk factors upon ICU admission and with new or progressive organ failure.
- If two or more risk factors are present, a baseline IAP measurement should be obtained.
- If IAH is present, serial IAP measurements should be performed throughout the patient's critical illness.

Patient has TWO or more risk factors for IAH/ACS upon either ICU admission or in the presence of new or progressive organ failure

Measure patient's IAP to establish baseline pressure

IAP measurements should be:

- 1. Expressed in mmHg (1 mmHg = 1.36 cm H_2O)
- 2. Measured at end-expiration
- 3. Performed in the supine position
- 4. Zeroed at the iliac crest in the mid-axillary line
- 5. Performed with an instillation volume of no greater than 25 mL of saline [1 mL/kg for children up to 20 kg] (for bladder technique)
- 6. Measured 30-60 seconds after instillation to allow for bladder detrusor muscle relaxation (for bladder technique)
- 7. Measured in the absence of active abdominal muscle contractions



Risk Factors for IAH / ACS

- 1. Diminished abdominal wall compliance
 - Acute respiratory failure, especially with elevated intrathoracic pressure
 - Abdominal surgery with primary fascial or tight closure
 - Major trauma / burns
 - Prone positioning, head of bed > 30 degrees
 - High body mass index (BMI), central obesity
- 2. Increased intra-luminal contents
 - Gastroparesis
 - Ileus
 - Colonic pseudo-obstruction
- 3. Increased abdominal contents
 - Hemoperitoneum / pneumoperitoneum
 - Ascites / liver dysfunction
- 4. Capillary leak / fluid resuscitation
 - Acidosis (pH < 7.2)
 - Hypotension
 - Hypothermia (core temperature < 33°C)
 - Polytransfusion (>10 units of blood / 24 hrs)
 - Coagulopathy (platelets < 55000 / mm³ OR prothrombin time (PT) > 15 seconds OR partial thromboplastin time (PTT) > 2 times normal OR international standardised ratio (INR) > 1.5)
 - Massive fluid resuscitation (> 5 L / 24 hours)
 - Pancreatitis
 - Oliguria
 - Sepsis
 - Major trauma / burns
 - Damage control laparotomy

Abbreviations

IAH - intra-abdominal hypertension ACS - abdominal compartment syndrome

IAP - intra-abdominal pressure

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