Measuring Intra-Abdominal Pressure

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Anatomic Compartments

- Cranium
- Chest
- Pericardium
- Limbs
Monroe-Kellie Doctrine

• At a critical volume pressure rises dramatically with any additional edema.
• This pressure rise leads to reduced perfusion pressure and reduced blood flow
ACS Literature: Publication explosion
The Problem

What Happens to the Body's Organs?
A Vicious Cycle

- Fluid resuscitation for critical illness
- Total body fluid third spacing/release
- Elevated intra-abdominal pressure due to bowel edema
- Venous compression
- Multi-system organ dysfunction/failure
- Reduced blood flow to organs
- Reduced cardiac output
- Reduced blood return to heart (preload)
Old Widget

Closed system for intravesical pressure

- Originally described by Kron & coworkers in 1984
- Modified by Iberti & coworkers in 1987, Cheetham in 1998
- Modified by Malbrain in 2004 as a complete closed system
AbViser Intra-Abdominal Pressure Monitoring Kit

Better Widget

Closed system in-line with the Foley catheter.

- Once attached it is left in place during entire time IAP is measured.
- 30 seconds to measure IAP
- Standardized measurement
- No reproducibility errors
AbViser AutoValve

AutoValve™ Valve in "Drain Mode"

Foley Attached

Diaphragm Deflated
(Drain Open)

Drain Bag Attached