

Bard® Intra-abdominal Pressure Monitoring Device Safe. Consistent. Convenient.

The Clinical Challenge – Abdominal Compartment Syndrome

A BDOMINAL COMPARTMENT SYNDROME (ACS) occurs in a wide variety of surgical and traumatic conditions. ACS is characterized by organ damage due to intra-abdominal hypertension (IAH), which occurs in up to 81% of ICU patients.¹

IAH is associated with significant morbidity and mortality in surgical and trauma patients.¹ In addition, studies show that the occurrence of IAH during intensive care stay is an independent risk factor for organ failure and mortality.¹

Prevalence of IAH

Clinical literature suggests monitoring all patients' intra-abdominal pressure (IAP) in the first days after intensive care admission. This is due to the high prevalence of IAH in the critically ill and its deleterious effects, which can impair every major organ system.

Aiding Clinical Judgment

Prevalence of IAH in Critically III Patients²

Abdominal Pressure	Total Prevalence	MICU Prevalence	SICU Prevalence
IAP ≥ 12 mmHg	58.8%	54.4%	65%
IAP ≥ 15 mmHg	28.9%	29.8%	27.5%
IAP ≥ 20 mmHg	8.2%	10.5%	5.0%

Traditionally, physicians have relied upon visual or physical detection of the signs of IAH. Recent studies show that a clinical estimation of IAP by examiner's feel of the tenseness of the abdomen has a sensitivity of approximately 40%.³

Kirkpatrick, et al, showed that the sensitivity and accuracy of clinical abdominal examination for identifying elevated IAP were 40% and 77%, respectively. In contrast, the use of bladder pressure measurements to determine elevated IAP provides a higher level of sensitivity and accuracy.⁴

"These findings suggest that more routine measurements of bladder pressure in patients at risk for intra-abdominal hypertension should be performed." 4

- Andrew Kirkpatrick, MD, et al

Intravesicular Monitoring – The Standard of Care

THE WORLD SOCIETY OF THE ABDOMINAL
Compartment Syndrome (WSACS) considers
intravesicular pressure (IVP) monitoring of IAP as the
standard of care for detecting the presence of IAH
and the associated clinical syndrome of ACS.⁵

Serial IVP measurements have been demonstrated to identify patients at risk for IAH and aid in the prevention of ACS, multiple system organ failure, and death.

However, as originally described by Harmon et al., IVP monitoring requires that a patient's urinary catheter be disconnected whenever an IVP measurement is made. Disruption of a normally closed, sterile urine collecting system is costly, cumbersome, and has been demonstrated to increase the risk of urinary tract infection (UTI).⁶

The Bard® Intra-abdominal Pressure Monitoring Device

ARD MEDICAL DIVISION, THE MARKET LEADER in urological drainage, has created an IAP monitoring device to address the clinical need for safe, consistent and convenient monitoring of intra-abdominal pressure.

The Bard Intra-abdominal Pressure (IAP) Monitoring Device is intended for the monitoring of intra-abdominal pressure via a Foley urinary catheter. The measured pressures can be used as an aid in the diagnosis of intra-abdominal hypertension (IAH) and the associated clinical syndrome of abdominal compartment syndrome (ACS).

The device is designed to follow CDC Category I recommendations for prevention of catheter-associated urinary tract infections (CAUTIs) by maintaining a closed urinary drainage system.⁷ Its unique valve port facilitates saline infusions through the catheter's sampling port while also maintaining the ability to obtain urine samples.

Safe

The Bard® IAP Device is designed to follow CDC Category I recommendations for prevention of CAUTIs by maintaining a closed urinary drainage system.⁷

It includes a StatLock® Foley stabilization device for proper securement of the indwelling catheter to prevent movement and urethral traction.

Consistent

The device ensures measurement reproducibility as part of an overall IAP monitoring system.

Convenient

The device contains materials necessary for intravesical IAP monitoring in a simple, convenient kit.

Reorder Code	IAP001
Description	Bard® Intra-abdominal Pressure Monitoring Device
Case Quantity	10



StatLock® Foley stabilization device offers proper securement of indwelling catheter to prevent movement and urethral traction.

Integrated valve port makes saline infusion easy and maintains urine sampling functionality.

Innovative clamp reliably interrupts flow without damaging the drain tube.

References:

- Malbrain, et al. Incidence and prognosis of intraabdominal hypertension in a mixed population of critically ill patients: A multiple-center epidemiological study. Critical Care Medicine. 2005; 33:315-322.
- Malbrain, et al. Prevalence of intra-abdominal hypertension in critically ill
 patients: a multicentre epidemiological study. Intensive Care Medicine. 2004;
 30:822-829.
- Malbrain MLNG. Different techniques to measure intra-abdominal pressure (IAP): time for a critical re-appraisal. *Intensive Care Medicine*. 2004; 30:357-371.
- Kirkpatrick AW, Brenneman FD, McLean RF, Rapanos T, Boulanger BR. Is Clinical Examination an Accurate Indicator of Raised Intra-Abdominal Pressure in Critically Injured Patients? Canadian Journal of Surgery. 2000; 43:357-371.
- World Society of the Abdominal Compartment Syndrome. Preliminary Consensus
 Definitions on Intra-Abdominal Hypertension (IAH) and Abdominal Compartment Syndrome
 (ACS): Results from the International ACS Consensus Definitions Conference 2005.
 (www.wsacs.org)
- Cheatham ML, et al. Intravesicular pressure monitoring does not cause urinary tract infection. *Intensive Care Med.* 2006 Oct;32(10):1640-3. Epub 2006 Aug 29.
- Wong, et al. Guideline for Prevention of Catheter-associated Urinary Tract Infections. Centers for Disease Control & Prevention. 1981.

For more information, please contact us at 1-800-526-4455 or visit www.bardmedical.com



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