

Clinical Insight

Intra Abdominal Pressure Measurement via the Intra Vesical Route.

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Background

Abdominal Compartment syndrome (ACS) is a condition that, until recently, was under appreciated, despite its potentially implications for all organ systems. Although the effects of ACS on different organs can be life-threatening, it was not until recently that the adverse consequences of the raised intra abdominal pressure were systematically studied. These studies have helped clarify the local and systemic effects of increased IAP and heightened awareness to the need for early diagnosis treatment.

Intra Abdominal Hypertension (IAH) is associated with significantly increased morbidity, mortality^[1] and adversely affects all organs^[2]. Furthermore, IAH causes an elevation of Central Venous Pressure (CVP), Pulmonary Artery Occlusion Pressure (PAOP), and Intra Cranial Pressure (ICP)^[3], further underscoring the importance of measuring IAH.

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Current Clinical Research

Recent clinical studies demonstrate that IAH, (defined as sustained or repeated IAP \geq 12 mmHg) and ACS (defined as sustained IAP \geq 20 mmHg and organ dysfunction/failure) are common pathological con-

ditions in the intensive care unit. In fact, IAH occurs in more than 50% of all surgical and medical ICU patients.^[4] In a study from 2004^[5] it was concluded that the use of a manometer measuring IAP via the intravesical route offers a rapid and cost effective way of making clinically validated IAP measurements.

The intra vesical route of measuring IAP has evolved as the gold standard for IAP measurement techniques.^[6]

The World Society of the Abdominal Compartment Syndrome (WSACS) has recognized the clinical importance of IAP monitoring, and made recommendations for a number of treatment options aimed at normalizing IAP.^[6] All who have an interest in the diagnosis, management, and/or treatment of IAH and ACS are invited to join the Society.

WSACS shares knowledge on diagnosis, management and treatment of IAH and ACS.

Further Reading

WSACS offers a searchable database of both Medline referenced as well as unpublished abstracts and studies on IAH / ACS. WSACS provides information on the World Congress on the Abdominal Compartment Syndrome (WCACS).

1. Manu LNG Malbrain et al: Incidence and prognosis of Intraabdominal hypertension in a mixed population of critically ill patients: A multicentre epidemiological study. CCM 2005 Vol. 33, No. 2.
2. Manu LNG Malbrain: Is it wise not to think about intra-abdominal hypertension in the ICU? Curr Opin Crit Care 2004; 10:132-145.
3. Cheatham ML et al: Preload assessment in patients with an open abdomen. J Trauma 1999; 46: 16-22.
4. Manu LNG Malbrain et al: Prevalence of intra-abdominal hypertension in critically ill patients: A multicentre epidemiological study. ICM 2004, 30 pg. 822-9.
5. Manu LNG Malbrain: Different techniques to measure intra-abdominal pressure (IAP): time for a critical re-appraisal
6. www.wsacs.org