Abdominal Compartment Syndrome (WSACS) as a sustained or repeated pathologic-al elevation of intra-abdominal pressure (IAP) ≥12 mmHg and abdominal compartment syndrome (ACS) as IAP >20 mmHg with new organ dysfunction or failure [1]. IAH/ACS are recognized with increasing frequency in critically-ill patients. ACS is encountered in surgical and medical intensive care units and must be considered as an important factor of multi-organ failure including splanchic, renal, liver, cardio-vascular, respiratory and central nervous system dysfunction. The syndrome is also associated with considerable morbidity and mortality. WSACS recommend that IAP be measured regularly in critically-ill patients who demonstrate risk factors for the development of IAH [1]. Even if these risk factors are found in cardiac surgery patients, the prevalence of IAH in cardiac surgery has not fully been elucidated.

We read with great interest the paper by Dal et al. [2] They aimed at identifying the risk factors for IAH in cardiac surgery patients. In their study, IAH is strongly associated with higher baseline IAP values, higher central venous pressure, positive fluid balance, extracorporeal circulation, use of vasoactive drugs and acute kidney injury. They conclude that patients presenting risk factors must be monitored properly during the perioperative period. We agree with their conclusions and would like to add a brief comment on therapeutic interventions.

Currently, the diagnosis and management of IAH/ACS is evolving tremendously, and comprehensive strategies to reduce IAP play an important role in such patients. Approaches or techniques of potential utility include sedation and analgesia, neuromuscular blockade, body positioning, nasogastric/colonic decompression, promoti-lity agents, diuretics and continuous renal replacement therapies, fluid resuscitation strategies, and percutaneous catheter drainage [1,3]. Non-operative strategies for the management of IAH/ACS may be summarized using five therapeutic goals: (1) evacuation of intraluminal contents; (2) evacuation of intra-abdominal space-occupying lesions; (3) improvement in abdominal wall compliance; (4) optimization of fluid ad-ministration; and (5) support of systemic and regional tissue perfusion [3]. Surgical abdominal decompression should be considered in any patient who demonstrates evidence of ACS. Decompressive laparotomy should not be feared or delayed because rapid decompression after the diagnosis of ACS dramatically improves cardiac function and results in improved organ perfusion and survival. Due to the severe morbidity associated with all forms of surgical decompression, the indications, timing and technique used should be carefully evaluated [3-5].

De Wolf et al. [4] reported two patients who required surgical abdominal decompression for ACS that developed early after emergency coronary artery bypass graft surgery. Both patients had a protracted clinical course, but they survived and were discharged from the hospital. Rabbi et al. [5] described a secondary ACS that oc-curred during an elective coronary revascularization which resulted in an inability to wean from cardiopulmonary bypass. After decompressive laparotomy was done, the patient was successfully weaned from bypass.

ACS is a potentially fatal entity of which all clinicians, and cardiovascular surgeons in particular, need to be acutely aware. We think that successful outcome depends on early recognition, early conservative treatment to reduce IAH and decompressive laparotomy if ACS develops in these complicated patients.

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References


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