Regarding “Abdominal compartment syndrome after mesenteric revascularization”

We read with interest the case report by Sullivan et al (J Vasc Surg 2001;34:559-61). We have also recently encountered abdominal compartment syndrome (ACS) after an elective procedure. The patient, a 69-year-old man, underwent bilateral renal artery revascularization for worsening chronic renal failure. This was done through a rooftop incision. On the left side, a splenorenal end-to-end anastomosis was performed. On the right side, there was a failed attempt to revascularize using the hepatic artery, and thus an 8-mm Gortex graft was used as a jump graft from the infrarenal aorta. Perioperatively the patient had a myocardial infarction. Twenty-four hours after the procedure, the patient became unstable and required increased ventilatory support. Oliguria developed, and the patient’s abdomen was tense and distended. A clinical diagnosis of ACS was made and confirmed when there was an immediate improvement in the ventilatory requirements following abdominal decompression. The laparotomy findings were 1500 mL of blood-stained fluid and a hematoma around the liver. The fluid was drained, and no active source of bleeding was encountered. However, 3 to 4 hours after the decompression, further complications again developed from the patient’s ischemic heart disease, including a labile blood pressure and arrhythmias. This required cardiac pacing and led to further deterioration of his renal function, which required hemofiltration. Following a prolonged stay in the intensive care unit the patient recovered and is awaiting discharge.

Our case, along with that of Sullivan at al, has shown that even 1200 to 1500 mL of intraabdominal fluid can lead to ACS. In our case the diagnosis was made clinically because of the classical clinical signs of increasing ventilatory support and oliguria that was subsequently confirmed with the immediate improvement in the patient’s condition.1,2 The subsequent delayed recovery was attributed to ongoing cardiac arrhythmias and not thought to be mainly caused by the ACS.

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REFERENCES
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