Anesthetic Management of Duodenal Atresia and Aorto-Enteric Fistula Secondary to Vascular Prosthesis Infection

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We aim to examine the anesthetic implications and management strategies in patients with aorto-enteric fistulas secondary to vascular prosthesis infection. Aorto-enteric (AEF) fistulas are either primary (PAEF) or secondary (SAEF), occurring as a late complication of aortic reconstructive surgery, or rarely, as a complication of an untreated aortic aneurysm. In this case, a 37M with PMH of HTN, middle aortic syndrome (MAS) s/p bypass graft from aortic arch to bifurcation (1986), Aortoenteric Fistula s/p endovascular repair underwent a bilateral axillary-femoral bypass, aortic stent-graft explant and primary repair of posterior duodenum defect x 2 (D3), pyloric exclusion, gastrojejuno-stomy, feeding jejunostomy, and omental flap.

Anesthetic considerations in this case included proper and adequate access, point of care testing utilization, appropriate transfusion goals, and presence of both SAEF and a vascular prosthesis infection.

Conclusions reached were three fold. Close coordination with surgeons regarding implications of intraoperative surgical reassessments guide proper arterial and central access. Arterial access should be on the anticipated non-bypass upper extremity and should be as distal as possible. Additionally, central access should be place in the internal jugular vein, as both subclavian and femoral sites are within the sterile field.

Point of care testing was effectively utilized throughout this case. Bedside activated clotting times, Epoc blood analysis and ROTEM were all utilized to guide heparinization, goal directed transfusion and adequate coagulation.