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## Commentary: Neighbors should keep their distance after esophagectomy

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The presence of an aorto-conduit fistula after esophagectomy is a rare but life-threatening condition. In most cases, it is fatal without surgical intervention and poses a challenge for the entire medical team. The actual incidence is unknown, as there are few cases reported in the literature. Patients usually present with a "herald bleed," followed by a latent period and eventual exsanguination. Survival of this complication is generally dismal due to delays in diagnosis. <sup>1</sup>

Feczko and colleagues<sup>2</sup> describe a patient who presented with massive hematemesis at 9 months after undergoing McKeown esophagectomy and provide a step-by-step description of the management of this patient. Although esophagogastroduodenoscopy seems to be a reasonable first step, massive hemorrhage could make it virtually impossible to obtain adequate visualization. Because time is of the essence, bypassing this step should be considered in selected cases. Making a diagnosis is critical to establishing an effective plan. It can be argued that if an aorto-conduit fistula is high in the differential, then direct transfer to a hybrid operating room will provide the surgical team with more flexibility to control the bleeding. Endovascular stent placement is an excellent treatment option to temporize the situation; however, this strategy it is not always technically feasible. Placement of an occlusive aortic balloon to control

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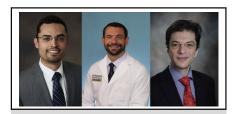
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## CENTRAL MESSAGE

Prompt recognition and multidisciplinary communication are critical to the successful management of an almost always lethal complication of esophagectomy.

the bleeding is a good alternative, as illustrated by this case. The use of a left thoracoabdominal approach allowed the authors to gain control of the aorta with supraceliac clamping and repositioning of the occlusive aortic balloon below the fistula. In the end, this resulted in a successful primary repair.

The use of endovascular stent placement has been previously reported in this setting. Although it can provide much needed time for patient resuscitation and stabilization, this treatment modality has a high likelihood of failure due to chronic infection and/or erosion of the stent into the conduit.<sup>3</sup> The operative principles of managing infected endovascular stents include graft excision and wide debridement of infected tissues. Surgical options include extra-anatomic bypass and reconstruction with arterial or venous allografts or autologous grafts, such as the neoaortoiliac system (NAIS procedure), which may be more resistant to infection.<sup>4</sup> Antibiotic-soaked prosthetic grafts, possibly in combination with antibiotic-loaded polymethylmethacrylate (PMMA) beads, also may be considered as alternatives in such infected fields.<sup>5,6</sup> Bovine pericardium represents another excellent option for in situ reconstruction; however, despite its high biocompatibility, it does not provide absolute protection when perivascular infection is ongoing.<sup>7,8</sup> Consideration for palliation may have a role in patients with poor cancer prognosis.

We commend the authors for their extraordinary efforts in the management of their patient. We agree that early diagnosis, rapid control of bleeding, and definitive repair are paramount for the successful management of these Nava, English, Kreisel Commentary

patients, as conservative management generally fails. A high degree of collaboration from a multidisciplinary stand-point and substantial resource mobilization are essential to achieve a successful outcome. Overall, the strategy presented by Feczko and colleagues should be a welcome guide to any surgeon facing this complex situation.

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