

INNOVATIVE COLLECTIONS

COMMENTARY FROM THE SECTION EDITOR



Saving the Esophagus—Saving the Patient

A rare, but devastating, consequence of atrial fibrillation (AF) ablation is subsequent development of an atrioesophageal fistula. More often than not, this is fatal. Avoidance is the key, but even under the best of circumstances it can be difficult, if not impossible, to avoid this extraordinarily rare complication.

While there may be difficulties in detecting an atrioesophageal fistula, even after such detection there is no treatment that is recognized as universally effective. Indeed, there is little clinical experience that has been reported to be successful. Scattered reports in the literature suggest that surgical intervention can be effective.^{1–3} One report indicates that success can be achieved by cervical esophageal ligation and decompression.³ Nevertheless, this and other surgical interventions are major undertakings, with potentially serious and even fatal consequences. The risks may be too high, making surgery impossible.

Temporary esophageal stenting to allow healing of esophageal perforations has been reported. In this case presentation, a self-expanding plastic stent was used to urgently treat the esophageal perforation.⁴ Such stents have been used for esophageal stenosis fistulas and leakages from other causes. Another case report, however, indicated a fatal outcome after an esophageal stent was placed.⁵ To avoid air embolism, carbon dioxide instead of air insufflation was used, but despite this transient ischemia during and after stent placement with carbon dioxide embolism led to a fatal outcome.

Conservative management has been suggested by some, but the mortality is extraordinarily high. Of course, atrial esophageal fistulae and/or esophageal damage may be present in some individuals for which this approach may be most appropriate.⁶

In this month's issue of *Innovations in Cardiac Rhythm Management*, Ellis et al present a dramatic case of successful treatment of esophageal perforation with a fully covered esophageal stent. Every indication in this report points to the need for urgent intervention. There were neurologic changes of aphasia and hemiparesis due to a stroke, with evidence for a fistula and esophageal perforation. A conservative approach certainly would not be possible. Surgery was not considered a good option.

Esophageal stenting has been used for other purposes with success. Quick thinking on the part of the team caring for the patient raised the possibility that a stent may be an effective treatment. A Wallflex stent (Boston Scientific, St. Paul, MN) was indeed placed without complication, acknowledging the potential high risks of such a procedure. The stent was successfully removed 4 weeks after deployment and the outcome was remarkably good.

While it will be difficult, if not impossible, to collect a large series of patients with atrioesophageal fistulae, captivating data now indicate the possibility that stent deployment, although potentially risky, may be the approach that should be considered for patients similar to the one described in this manuscript. On many occasions, surgical intervention has risks that may exceed benefits; however, in cases such as this one, although extremely rare, deployment of an esophageal stent may be potentially life saving.

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