

Use of Coronary Angiography Wires As Guide Wires to Avoid Iatrogenic Perforation During Stenting of Oesophageal Cancers

Oesophageal perforation remains a devastating event that is difficult to diagnose and manage, especially in the presence of malignancy. In 59% to 81% of all cases the injury is iatrogenic, and the increasing use of endoscopic procedures can be expected to lead to an even higher incidence of perforation in coming years [1,2]. Over the past 30 years, the actual risk of perforation during diagnostic flexible oesophagoscopy has remained low, and is estimated to occur at a frequency of 0.03% compared with 0.11% during rigid endoscopy [3]. However, during instrumental procedures with obstructing oesophageal tumours, such as dilation and stenting, perforation rates of 1%–10% have been reported with mortality rates of up to 60% despite treatment [4,5].

The conventional approach employs a stiff endoscopic guide wire with a flexible tip screened under video fluoroscopy, which is passed across the lesion into the stomach, and over which the stent is deployed. However, it has been our experience that with very friable tumours that completely occlude the lumen, a stiff guide wire can perforate or dissect the oesophageal wall. We therefore now use an endoscopically placed 0.035-inch polytetrafluoroethylene (PTFE)-coated J-tip coronary angiography wire (Figure 1), which is floppy enough to avoid perforation but stiff enough to cross tightly obstructing tumours and allow subsequent passage of instruments. Following the British Society of Gastroenterology guidelines, published in October 2003, which state that guide wires should be single-use to minimize any possible risk of transmitting prion disease, this also represents a cost-effective alternative with the angiography wire being approximately one-fifth the cost of a standard endoscopic guide wire (£7 vs. £35, €10 vs. €51 or \$12 vs. \$60).

We have used this technique in 70 procedures over a 22-month period, with no complications. It is a useful technique to have in the armamentarium of all endoscopists treating oesophageal cancer.



Figure 1 A 0.035-inch polytetrafluoroethylene (PTFE)-coated standard exchange J-tip Emerald guidewire (Cordis Corporation, Miami, USA).

Competing interests: None

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