combined with no morbidity or mortality, although admittedly in a small series, is certainly encouraging.

The pressure inside the balloon rises to a maximum of 300 mmHg (information supplied by Dataspoke) which is well within the pressure required to rupture a normal oesophagus [2] not that we are using the IABP in patients with normal oesophaguses. At that pressure, the pump alarms and the balloon stops inflating which acts as the safety mechanism we referred to in the original article [1]. Furthermore the pressure inside the balloon can be continuously measured by connecting a three way tap in the middle of the helium line and a manometer line from that point to a pressure transducer that will give a digital read out of the pressure inside the balloon as it inflates and deflates.

The electronically built in feed back mechanism allows a gradual increase in the pressure applied inside the balloon as the augmentation is increased. The application of hand held gauges are not any more sensitive and much more variable depending on the operator.

The fact that the authors obviously work in a stand alone thoracic surgery department rather than a combined cardiothoracic unit should not be used as a barrier to the use of IABP. Most units have both cardiac and thoracic surgery and therefore the balloon pumps are readily available. The cost of the balloons should be weighed against the complexity and increased risk of perforation in these selected patients if ordinary methods are used. Certainly not all units find this prohibitive.

The rigid oesophagoscope was used in our technique, as a port only and therefore added no extra risk of perforation. It was used to allow the introduction of the flexible oesophagoscope, the balloon and the contrast media. Another precaution in our technique is the use of screening during the procedure to confirm the position of the balloon prior to inflation and also to assess the success of the dilatation and integrity of the oesophagus at the end of the procedure.

The repeated dilatation with the rapid inflation and deflation of the balloon might be another advantage of this method resulting in the gradual dilation of the stricture. This might be a better approach for dilating the oesophagus rather than the sustained once off pressure from controlled radial expansion balloons.

We do not agree with Berrisford et al. and believe that the use of IABP should be considered as a viable option for the management of complex oesophageal strictures in the armamentarium of the Cardiothoracic Surgeon.

References

[1] Loubani M, Chetty G, Shawkat S, Leverment JN. Oesophageal sti-
tures: new indication for intra-aortic balloon pumps. Eur J Cardi-

Letter to the Editor

Re: Fistula of the internal thoracic vessels: report of two cases

Rasheed A. Saad
Cardiopulmonary Transplant Unit, Freeman Hospital, High Heaton, Newcastle upon Tyne, NE7 7DN, UK

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I read with interest the case report by Hassan et al. [1] describing two cases of iatrogenic internal mammary arteriovenous fistula.

Arteriovenous fistula of the internal mammary artery (IMA) is still an extremely rare complication following cardiac and thoracic procedures. The incidence of internal mammary arteriovenous fistula is likely to increase as a result of the globally increasing number of cardiac and thoracic surgical procedures.

Early treatment of internal mammary arteriovenous fistula has been recommended to avoid all potential complications. However, because spontaneous closure of a small fistula may occur [2], an initial period of close observation of the patient may be justified.

I note in case 1 that you have had recurrence of the internal mammary arteriovenous fistula after percutaneous endovascular embolization. Did you embolize both antegrade and retrograde pedicles of the fistula? Silva et al. [3] recommended embolization of the antegrade as well as the retrograde pedicles to prevent recurrence secondary to retrograde flow from the superior epigastric artery.

References


* Corresponding author. Tel.: +44-116-2871-471; fax: +44-116-2502 449.
E-mail address: mahmoud.loubani@ntlworld.com (M. Loubani).

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