A simple tip for the use of staplers during liver surgery

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The use of vascular staplers in liver resection is well established.¹ An umbilical tape or sling is usually recommended to loop the portal or hepatic venous structures prior to stapling. However, these need to be removed before firing, or may be included in the fired stapler, and could cause the stapler to misfire. This results in lack of traction on the structure to be stapled, and a greater risk of the stapler being fired too close to the portal bifurcation or the inferior vena cava, respectively. This is particularly relevant in cases where hepatic veins are short and thick or exposure is poor (when cirrhotic or enlarged liver is present).

We describe a simple, safe technique to loop the portal structures or hepatic veins, and recommend that the structure is encircled

Figure 1 Transection of the right hepatic vein using a stapler, using a thread (Vicryl 2-0; Ethicon, Somerville, NY, USA) rather than a sling to loop the vein.

with a thread rather than a sling or umbilical tape (Fig. 1). The thread is not removed before firing and can be used to retract the patient side of the structure away from the stapler, so as to ensure that the stapler fires as close to the specimen as possible. The thread can be safely cut by the stapler without causing any disruption to the staple line.

Reference

1. Fong Y, Blumgart LH. Useful stapling techniques in liver surgery. *J Am Coll Surg* 1997; **185**: 93–100.