Technique

Cholecystectomy cholangiogram snare

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A simple instrument has been designed to facilitate operative cholangiography by substituting a snare for the temporary cystic duct ligature commonly used.

The usual method of performing peroperative cholangiography is to inject the medium down a cannula introduced into the cystic duct, a ligature being tied around the duct with its enclosed cannula to make the system watertight and hold the cannula in place. Tying this ligature can be a tedious business in a fat patient or one with a high porta hepatis and the cannula can become dislodged in the process. When the time comes to remove the cannula, this ligature must be cut, which may result in damage to the cystic duct. Should the cannula have been introduced near the confluence with the common bile duct, such damage may result in a postoperative biliary leak.

The snare (Fig. 1) replaces the use of this ligature in the following way:

A long piece of thread or catgut is passed around the cystic duct and the ends are then placed in the

Fig. 1 The instrument is 27 cm in length and is used in conjunction with a piece of plastic or rubber tubing just shorter than the shaft of the instrument.

notch of the snare. The cannula is introduced into the cystic duct in the usual way (Fig. 2). The snare is then withdrawn through the tubing, carrying the ends of the ligature material with it. When the tubing is pushed firmly down onto the cystic duct and a tube clamp or artery forceps applied (Fig. 3), a watertight seal is obtained. The tubing is long enough to carry the forceps outside the x-ray field. At the end of the procedure, the cannula is released by simply removing the forceps. The ligature can then be used to tie off the cystic duct stump.

I have tried out this instrument over several months and found it to be a valuable adjunct in cholecystectomy. In addition to the advantages mentioned, the fact that the entire procedure could be performed with one hand was found to be most useful when no assistant was available.

The only snag encountered was due to the use of tubing with too great a lumen. In this case, the cystic duct and cannula 'tent' into the tubing, obstructing the cannula. For this reason, and also in order to obtain a watertight seal, the lumen of the tubing should be only slightly greater than the diameter of the snare.

The instrument is supplied by Down Bros, Mayer & Phelps Ltd, from whom details are available on request.

Fig. 2

Fig. 3