A retractor for cholecystectomy

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A self-retaining retractor has been designed to enable one surgeon to perform cholecystectomy and exploration of the bile duct with a minimum of assistance.

The instrument consists of a horseshoe shaped collapsible frame and four specially designed blades. It is ideally suited for a right subcostal or a transverse incision.

Adjustment and removal for performing on-table cholangiography and reapplication are all straightforward.

In biliary surgery, good exposure is an essential prerequisite for ensuring safety and efficiency. The surgeon's armamentarium includes instruments which are fixed to the operating table. In many parts of the world financial and manpower resources may be scarce. A self-retaining retractor has been designed to enable a surgeon to perform cholecystectomy and other biliary procedures with little extra help.

In Figure 2, two large and two small sets of blades are shown. A smaller set for use in thin patients and a larger set for use in obese or large patients. Each set consists of two specially designed blades; each of the

Instrument

The retractor consists of a horseshoe-shaped, collapsible frame with a self-locking device (Fig. 1). The lock allows the retractor to be set at the required degree of retraction and it is released by turning the knob. There are two sets

Figure 1. Fully assembled retractor.

Figure 2. Two large and two small sets of blades.

Figure 3. Exposure provided by the blades. Extrahepatic biliary ducts, cystic duct and artery and gallbladder (arrowed) are shown.

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pairs of blades has a different curvature. The more curved blade holds the liver, exposing the gallbladder and porta hepatis. The function of the other, straighter blade is to hold the bulb of the duodenum and transverse colon downwards, thereby providing good exposure of the gallbladder and bile duct (Fig. 3).

Discussion

This self-retaining retractor has been used in Burton-on-Trent General Hospital since February 1987. It is ideally suited for either a right subcostal or a transverse approach for cholecystectomy and exploration of the common bile duct; its use in the paramedian approach also proved useful.

Unlike some other retractors (1), it is not fixed to the table. Assembly and positioning of the retractor is simple, and it is easily removed and reapplied after an intraoperative cholangiogram. The exposure provided is steady and stable, and the retractor gives a minimum of interference with the surgeon’s working field.

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Reference


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The Southampton teaching triad: an audit of operative surgical instruction
Volume 72, Number 4, Pages 243–6.

An error occurred in the reproduction of Figure 1, p 244.

The figure in the top left-hand circle should read 37 and not 37.4.

A correct version of the figure is reproduced for clarification.

Figure 1. Vascular surgery triad (including amputations). Figures shown are actual numbers of operations performed; varicose veins are excluded.