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Single incision laparoscopic surgery

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Abstract

As a complement to standard laparoscopic surgery and a safe alternative to natural orifice transluminal endoscopic surgery, single incision laparoscopic surgery is gaining popularity. There are expensive ports, disposable hand instruments and flexible endoscopes that have been suggested to do this surgery and would increase the cost of operation. For a simple surgery like laparoscopic cholecystectomy, these extras are not needed and the surgery can be performed using standard ports, instruments and telescopes. Triangular port insertion and use of instruments by the "chop stick method" are recommended to successfully do the procedure as we have done in our so far small series of 40 cases.

Key words: Single incision laparoscopic surgery; Cholecystectomy

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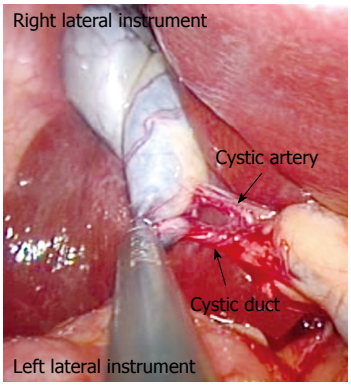

Figure 1 Instrument position while Calot's triangle is defined.

TO THE EDITOR

I read with great interest the article by Hirano *et al*[1] published in issue 2, volume 16 of *World J Gastroenterol* 2010. The use of loop is a good method for retraction without perforating the gall bladder. The method would increase safety of the procedure, but in purist terms, makes it a double incision laparoscopy (DILS).

We have done 40 single incision laparoscopic surgeries using conventional trocars, instruments and telescope. This is to avoid the increase in cost that is inevitable if we were to use two reticulating instruments and the more expensive semi flexible laparoscope or special ports[2].

By inserting the trocars in a triangular manner with a 10 mm telescope inserted from the top port, we are able to reduce sword fighting of instruments. The lower 5 mm ports are manipulated by the "chop stick method" developed by us to ensure that they do not clash. A 30° telescope, 5 mm in diameter, is introduced from the lower left cannula at the time when the 10 mm clip applier is introduced from the top cannula. The clips are only applied when a large window is made in the Calot's triangle (Figure 1).

After the first 20 cases, the instrument clashing, air leak,

and duration of surgery have reduced. This goes to show that there is a learning curve in this procedure[3] during which the main problems are of instrument clash and air leak.

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