COMMENTS ON: STARTING A LAPAROSCOPIC HEPATECTOMY PROGRAMME

Dear Sir.

We read the paper, "Starting a laparoscopic hepatectomy programme", by Wang et al⁽¹⁾ with great interest. I would like to congratulate the team for their excellent results obtained in the initial five cases of laparoscopic liver resection. We started our programme with laparoscopic liver resections in 2005. To date, we have performed 50 cases of laparoscopic resections with very encouraging results. We have, however, some differing points on the technique with that of the authors, which we hope they can address.

The authors used the Harmonic scalpel as the principal device to divide the liver parenchyma. In our experience, we find this device more suitable for normal liver texture than for cirrhotic livers. In our experience with cirrhotic livers, we find the LigaSure[®] a more suitable device.

In the selection criteria for major hepatectomy (resection of more than three liver segments), an ICG value of less than 14% was accepted as the "cut off" level for resection. In the authors' series, however, none of the patients had more than two segments resected. Were there any patients requiring major hepatectomy who were denied resection on this criterion?

The authors used the umbilical position for the camera port. We find that this position is too low for us to visualise the suprahepatic caval dissection safely. In general, we will choose a position that is at the expected "summit" of the abdominal wall upon insufflation, which will give a very good visual field for suprahepatic dissection.

The authors positioned the ports such that they allowed the surgeon to "triangulate" onto the lesion. We find that this may not be the best position. More importantly, the "working" ports should be "in line" with the transection planes. Also in our experience, satisfactory resection can be undertaken on three peripheral segment lesions without dividing the falciform and triangular ligaments.

The authors commented that air embolism caused by pneumoperitoneum is unfounded, with no previous case report. However, this complication has previously been reported by many authors including one previously reported in this journal.⁽²⁾

The authors emphasised on the use of central venous line and central venous pressure. We discovered that the central venous pressure becomes irrelevant with the laparoscopic approach as long as the pressure is less than 12 mmHg, which is usually the case in a normal patient. What level of central venous pressure do the authors consider optimal in their experience?

The authors use a Trendelenburg position during their surgery. We find this position difficult to operate laparoscopically on the liver as the bowels and omentum quickly and very often come into view and obstruct the procedure. We prefer a Reverse Trendelenburg position.

We found in our experience that there are many varying techniques depending on the location of the tumour and "quality" of the liver, as well as the ease for inflow vessels dissection. We feel that a "standard" method can only be recommended to a specific form of resection, such as a left lateral sectionectomy.⁽³⁾

Yours sincerely,

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