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The Critical View of Safety in Laparoscopic Cholecystectomy: Towards A National Consensus

John O'Kelly, Joshua De Marchi, William Joyce Ir Med J. 2015 Jan; 108(1):26

Sir,

Laparoscopic Cholecystectomy (LC) is one of the commonest operations performed by surgeons today. Despite the decreasing incidence of bile duct injury (BDI) since the introduction of LC, it still remains a major complication today¹. The commonest cause of BDI is misidentification of the anatomy of Calot's Triangle. A technique of identification of this anatomy, called the critical view of safety (CVS), was first described by Strasberg et al. in the mid-nineties and has been shown to significantly reduce the incidence of BDI¹⁻³. Despite its success, it has failed to gain universal acceptance and the infundibular approach to dissection is still being taught today.

Currently in Ireland, there are no national guidelines or protocols in place for performing or training laparoscopic cholcystectomy. This prompted us to carry out an anonymous postal questionnaire in order to determine the level of anatomical knowledge and application of the CVS among Irish general surgeons. The questionnaire was sent to all general surgeons practising in the Republic of Ireland (N=187). We received 95 completed questionnaires which represented a response rate of 51%. Of the 95 responders, 91% (n=86) perform laparoscopic cholecystectomy. From this group, 80% (n=69) perform emergency or urgent LC and 55% (n=47) perform more than 50 LC's per year. When performing LC, the critical view of safety was the sole method used by 31% (n=27) of surgeons, 2% (n=2) of surgeons use the infundibular approach alone, 54% (n=46) use both techniques and 13% (n=11) use neither technique. Surgeons who did not use either technique and were involved in training surgical residents accounted for 12% (n=10) of the group. Finally, those who do not use either technique and perform emergency/urgent LC's accounted for 12% (n=10) of the total.

These results represent a "snapshot" of the anatomical approaches currently used and taught by general surgeons in Ireland when performing laparoscopic cholecystectomy. While the majority of surgeons (n=73, 85%) practice either technique or both, it is worrying that 13% (n=11) do not use or understand either technique. It is also significant that while 82% (n=64) demonstrate the CVS when training surgical residents there are 5% (n=4) who teach the infundibular technique alone and 13% (n=10) who teach neither technique. Current literature advocates the critical view of safety as the most effective method of reducing morbidity and mortality associated with laparoscopic cholecystectomy^{2,3}. Recent practice guidelines by the European Association of Endoscopic Surgery (EAES) recommended the critical view of safety as the most effective approach to prevent BDI⁴. Despite this there are currently no national guidelines or protocols in place with regard LC. We believe the CVS approach to LC should be integrated into national guidelines and should be mandatory, in particular in training of surgical residents.

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