Technical Section

TECHNICAL NOTES & TIPS

TECHNICAL NOTES

Clipless technique of laparoscopic cholecystectomy using the harmonic scalpel

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BACKGROUND

The technique of laparoscopic cholecystectomy still has areas requiring refinement, including complications of clips being dislodged. The use of the ultrasonically activated scalpel for tissue cutting and coagulation is a potential replacement for electrosurgery, which can be related to different complications. The harmonic scalpel was previously used for the division of the cystic artery and liver-bed dissection. Recent advances in harmonic scalpel technology now provide safe division and closure of the cystic duct up to 6 mm in diameter.¹⁻⁵

TECHNIQUE

This was a prospective study of 22 patients undergoing laparoscopic cholecystectomy using the harmonic scalpel. The harmonic scalpel was used as the sole instrument for division of the cystic duct and artery as well as dissection of the liver bed. The average age of the patients was 42.5 years (range, 22–61 years) with 5 males and 17 females. The average operation time was 34 min. The average postoperative in-patient stay was 7.2 h (all discharged on the same day of surgery). No patients developed postoperative haemorrhage or bile leakage.

DISCUSSION

The harmonic scalpel provided complete haemobiliary stasis for all patients in this study. However, we would not recommend division of the cystic duct of greater than 6 mm in diameter; in cystic ducts greater than this, an alternative ligature or clip technique should be used. Furthermore, utilising a single disposable instrument rather than several disposable instruments coupled with reduced in-patient stay may have cost-saving implications.

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Improvised urinary bladder irrigation system

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BACKGROUND

Urinary bladder irrigation is done in cases of both haematuria and as a part of any intervention in bladder and prostate such as transurethral prostatic resection and mensa irrigation.^{1,2} This is done using a 3-way irrigation urethral catheter. Usually, the size available is 16-Fr and above; however, in cases of stricture, a smaller size is required. We describe a technique for this situation.

TECHNIQUE

Materials required are a number 5 infant feeding tube, a 2-way Foley catheter, and anaesthetic lubrication jelly. Maintaining proper antisepsis, the urethra is lubricated with jelly and the infant feeding tube is introduced. A Foley catheter of required size is introduced and the balloon is inflated. The infant feeding tube is attached to the catheter by adhesive tape. Irrigation fluid is connected to the feeding tube. Using this technique, both