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The following abstract was omitted on the bottom, left-hand side of page S368 (Hepatobiliary and Pancreatic Surgery Section) where a duplicate abstract was printed in its place.

THE EFFECT OF INTRAPERITONEAL LOCAL ANAESTHESIA IN LAPAROSCOPIC CHOLECYSTECTOMY: A META-ANALYSIS, A P Boddy BM BCh, S Mehta BM BCh, M Rhodes MD, Dept of General Surgery, Norfolk and Norwich University Hospital, Norwich, UK

Introduction: Intraperitoneal administration of local anaesthesia is often used to improve pain relief following laparoscopic cholecystectomy. However, several studies have shown that this technique may be ineffective, and there are concerns over the possible toxic effects of the agents used. We have conducted a meta-analysis to establish whether intraperitoneal local anaesthesia is beneficial in laparoscopic cholecystectomy.

Methods: A search of MEDLINE, EMBASE and the Cochrane Library databases revealed 28 randomised controlled trials assessing intraperitoneal local anaesthetic use in laparoscopic cholecystectomy. Of these, 18 studies with 875 patients met the inclusion criteria for quantitative analysis. The weighted mean differences (WMD) in visual analogue pain score at 4 hours post operatively were pooled using a random effects model. In addition, we analysed the mean differences in post-operative analgesic consumption.

Results: Overall, the use of intraperitoneal local anaesthesia resulted in a significantly reduced pain score at 4 hours (WMD -9 mm, 95% CI 13 to -5). Subgroup analysis showed that the effect was greater when the local anaesthetic was given at the start of the operation (WMD -12 mm, 95% CI -16 to -7) compared to instillation at the end (WMD -5 mm, 95% CI -9 to -2). There was also a significantly reduced analgesia requirement following the use of intraperitoneal local anaesthesia (standardised mean difference = -1.4 , 95% CI -2.6 to -0.1).

Conclusions: Administration of intraperitoneal local anaesthesia results in a significant improvement in early post-operative pain. Furthermore, the effect may be greater if instillation is performed at the start of the procedure. This technique may be particularly useful for day-case laparoscopic cholecystectomy.