Mid-term Outcomes of Laparoscopic Versus Open Choledochal Cyst Excision in a Tertiary Paediatric Hospital

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Abstract

Introduction: Paediatric laparoscopic choledochal cyst excision has increasingly gained acceptance as an alternative to open excision. Laparoscopic excision is feasible and safe in the short term, but long-term outcomes are not as well established. KK Women's and Children's Hospital started performing laparoscopic choledochal cyst excision in children since 2007. In this paper, we report our experience with the laparoscopic approach, and the early and mid-term outcomes in comparison with the conventional open approach.

Materials and Methods: Thirty-five consecutive cases by a single surgeon between May 2006 and April 2012 were retrospectively reviewed. Patient characteristics and surgical outcomes were analysed.

Results: There were 13 laparoscopic and 22 open cases. Baseline patient characteristics were similar. Operative time was longer in the laparoscopic group. Three cases in the laparoscopic group were converted to open in our early experience. There were no differences in time to feeds or length of hospitalisation. One laparoscopic case developed minor bile leak that resolved on conservative management. There were no complications in the laparoscopic group on median follow-up of 35 months. In the open group, there was 1 case of pancreatitis, cholangitis, and hypertrophic scarring respectively. There were 3 cases of suspected adhesive colic that resolved without surgery.

Conclusion: Laparoscopic choledochal cyst excision enjoys excellent early and mid-term outcomes compared to open excision, even in centres with smaller patient volume. It should be the approach of choice where technical expertise is available.

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