Laparoscopic Surgery in Newborns and Infants: An Update

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Development of laparoscopic or minimally invasive surgery (MIS) in infants and children has taken a tremendous pace over the past decade. With the availability of appropriately sized fine instruments tailored made for small paediatric patients, together with significant improvement in surgical technique and anaesthetic experience, a wide range of operations can now be performed by the laparoscopic approach even in small newborn infants. These include a whole spectrum of gastrointestinal tract operations, herniotomy and even more complicated thoracoscopic and laparoscopic reconstructive procedures, e.g. oesophageal anastomosis for oesophageal atresia and surgery for choledochal cyst and biliary atresia. Evidence so far suggests that minimal access surgery results in a more rapid recovery, shorter hospital stay and much better wound cosmesis. The advent of MIS has revolutionised the overall management strategy for certain diseases such as Hirschsprung's disease, imperforate anus and gastro-oesophageal reflux. There is no age limit to its application. With further improvement in technology and advances in surgical experience and skills, there is little doubt that laparoscopic surgery would gain a much wider acceptance and become the treatment of choice in place of conventional open surgery for the great majority of surgical conditions in infants and young children in this new millennium. (HK J Paediatr (new series) 2003;8:327-335)

Key words: Infant; Laparoscopy; Newborn