

SX6: ROBOTIC-ASSISTED SURGERY FOR RESECTION OF GASTRIC DUPLICATION CYSTS IN A CHILD (GDCS): A CASE REPORT

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Background Duplications of the alimentary tract are rare congenital anomaly. Gastric duplication cysts (GDCs) represent 4% of all alimentary tract duplications, and they usually become symptomatic before 2 years of age. Early diagnosis and surgical excision in the neonatal / infantile period is usually advocated to avoid potential morbidity and neoplastic degeneration. In pediatric literature there are few reports about laparoscopic resection of GDC but, to the best of our knowledge, robotic-assisted surgery for this condition has never been reported.

Materials and methods We report a case of a male patient with post-natal incidental ultra-sonographic diagnosis of two gastric cystic masses (maximal diameter 25 mm and 8 mm, respectively), increasing in size during follow-up. The patient didn't show any gastrointestinal or respiratory symptoms during his growth. At 20 months of age, MRI confirmed the presence of 2 round gastric masses (44x35 mm and 16x12 mm). Two months later (patient's weight 11.5 kg), elective robotic-assisted excision of the cysts combined with suture of muscular layers was completed without complications (da Vinci System XI, console time 115').

Results The patient was discharged 6 days after intervention, feeding normally. Hystologic findings confirmed two entirely excised gastric duplication cysts with gastric and respiratory epithelium. After 1-year, clinical and ultra-sonographic follow up didn't evidence any problem.

Conclusions In our single experience, we showed that robotic-assisted cystectomy without mucosal perforation is safe, effective and feasible for resection of gastric duplication cysts in children, adding to standard laparoscopic surgery smooth, consistent and precise movements of articulated surgical instruments, with ergonomic comfort and better 3-D visualization for the surgeon.

These results are achieved without difference versus laparoscopy in terms of operative time, complications or length of hospitalization.

This is the first reported case of robotic-assisted cystectomy for CGD in a child.

Key words intestinal duplications, robot-assisted surgery, children