LAPAROSCOPIC RESECTION OF A COLONIC DUPLICATION

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Case Report:
A previously healthy eighteen-year-old female presented to the emergency department with sudden onset of severe left lower quadrant abdominal pain, fever, and tachycardia. Symptoms began two hours prior to admission and were not associated with nausea, vomiting, or constipation. Laboratory studies were significant for a leukocytosis of 16.8 and a negative urine pregnancy test. Abdominal ultrasound was only significant for a small amount of free pelvic fluid. CT scan of the abdomen and pelvis was significant for a thin walled fluid collection in the left mid-abdomen adjacent to the descending colon. The patient was taken to the operating room for exploratory laparoscopy. A ruptured colonic duplication was identified attached to the transverse colon and omentum. The descending colon and splenic flexure were mobilized and the omental attachments of the enteric duplication were divided. Following this the segment of the transverse colon that was densely adherent to the enteric duplication was delivered through a Bianchi type incision. The enteric duplication cyst was then dissected from the transverse colon. There was no communication between the cyst and the lumen of the transverse colon. The patient was discharged home on the second post-operative day tolerating a regular diet, her symptoms alleviated.

LAPAROSCOPIC MANAGEMENT OF A MISSED SUBHEPATIC APPENDICULAR ABSCESS IN A 5-YEAR-OLD CHILD

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Objective:
To demonstrate a case of laparoscopically treated and originally missed subhepatic perforation of the appendix.

Methods:
A 5-year-old child presented to a regional hospital with abdominal pain and vomiting. Markers of acute inflammation were very high (WBC 16.1/nl, CRP 138.4 mg/l). Abdominal sonography was normal. Chest X-ray suggested a right-sided pneumonia and a right-sided subdiaphragmatic air-fluid level. Despite antibiotics, the general condition worsened throughout the next 2-weeks therapy. The pleural effusion increased and required tapping. Now, ultrasound suggested a liver abscess secondary to basal pneumonia. Percutaneous drainage under sonographic guidance failed due to intestinal loop interposition. The child was transferred. Laparoscopy revealed a subhepatic perforation of the appendix. The 250 ml pus was drained.

Results:
The preoperative diagnosis of an intrahepatic abscess was incorrect; the lesion was extraperitoneal. Laparoscopic evacuation was easy. Postoperative recovery was prompt.

Conclusion:
Missing perforations of an atypically positioned appendix in children is not uncommon. Laparoscopy can be helpful in cases of doubtful ultrasonography.

TRANS-UMBILICAL LAPAROSCOPIC-ASSISTED APPENDICOTOMY (T.U.L.A.A.): RETROSPECTIVE ANALYSIS

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Introduction: appendectomy is one of the most commonly performed surgical procedures in general surgery and laparoscopic appendectomy represents the beginning of minimal invasive era in visceral surgery. But until yet, laparoscopic appendectomy is not the standard method for removal of the appendix and discussion about the value and the advantages of laparoscopic appendectomy is still going on.

Aims: The authors report their experience about trans-umbilical laparoscopic assisted one-trocar appendectomy (T.U.L.A.A.) in a retrospective analysis. From November 2001 to December 2004 we have managed 94 patients (59 females and 35 males).

Results: We have analysed 94 T.U.L.A.A.: 68 surgical routine and 26 in emergency. The surgical mean time was 38 minutes: 37.9 in routine and 38.2 in emergency. The histological evaluation shows 60 hyperemics appendicitis, 25 phlegmonosics and 9 empyematosics. Conversion to the open procedure was necessary in 1 patient. Complications: 1 peritonism the second day after surgery and 2 suppurations of the cut.

Conclusions: T.U.L.A.A. in the treatment of appendicitis allows to explore the abdominal cavity completely and resolve associated pathologies; the aesthetical results are better; correction of umbilical hernia is possible and postoperative pain is reduced; quick recanalization; shorter hospitalization and time inactivity.

There are few disadvantages: the use of only one instrument doesn’t allow the mobilization of subserosa appendix or strongly adherent to the intestinal loops; the small umbilical breach doesn’t allow the passage of large gangreneted appendix without risking laceration. The duration of T.U.L.A.A. is comparable to laparotomic approach (mean time 29.5 minutes). There is no time difference between routine and urgency laparoscopic approach.

LAPAROSCOPIC EXTRA MUCOSAL BIOPSIES IN COLON DYSMOTILITY DIAGNOSIS

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Although Hirschsprung’s disease is ruled out in most patients with motility disorders using standard rectal biopsy techniques, dysmotility disorders of the colon are extremely difficult to diagnose in a vast majority of patients. Elaborate diagnosis of such patients is only possible after inspection of the colon and obtaining multiple biopsies for histopathological investigations. In such cases it was traditionally opted against taking serial colon biopsies due to the invasiveness of the open technique. The laparoscopic extra mucosal biopsy (LEMB) technique has been found suitable for such patient groups. This technique requires no or little colon preparation and can be performed as a day care procedure. LEMB is performed using an umbilical optic port along with two work ports using 3.5 mm or 5 mm instruments depending on the age of the child. The procedure involves identification of pathological colonic segments, incision of the taenia libera using metzenbaum scissors without opening the colonic mucosa, elevation of the biopsy edge and further preparation between the mucosa and serosa using metzenbaum scissors until the desired length of the biopsy has been obtained. In case of bleeding that may obscure vision at the site of biopsy, saline washings are utilized. In none of the cases performed at our center, a colon mucosal injury/perforation was encountered. LEMB is a safe technique which is easy to perform. After entering the abdominal cavity it takes an average of 2–3 min to take a biopsy. LEMB in our practice is a minimal invasive technique to obtain serial colon biopsies without morbidity for extensive histopathological examinations in severe motility disorders of the colon.