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O001—COLORECTAL—Malignant

RANDOMISED CLINICAL TRIAL OF SELECTIVE DECONTAMINATION OF THE DIGESTIVE TRACT IN ELECTIVE COLORECTAL CANCER SURGERY (THE SELECT TRIAL)

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Aims: Infectious complications and anastomotic leakage affect approximately 30% of patients after colorectal cancer surgery. The aim of this multicenter randomized trial was to investigate whether selective decontamination of the digestive tract (SDD) reduces these complications of elective colorectal cancer surgery.
Methods: The effectiveness of SDD was evaluated in a multicenter, open-label, randomised clinical trial in 6 centres in The Netherlands. Patients with colorectal cancer scheduled for elective curative surgery with a primary anastomosis were eligible.
Oral colistin, tobramycin, and amphotericin B were administered to the SDD group to decontaminate the digestive tract. Both groups received intravenous cefazoline and metronidazole for peri-operative prophylaxis. Mechanical bowel preparation was given for left sided colectomies, sigmoid and anterior resections. Anastomotic leakage was the primary outcome while infectious complications and mortality were secondary outcomes. This trial was registered with ClinicalTrials.gov number NCT01740947.
Results: In total, 228 patients were randomized to the SDD group and 227 to the control group until the trial was stopped after interim-analysis demonstrated that superiority was no longer attainable. Effective SDD was confirmed by interspace DNA profiling analysis of rectal swabs. Anastomotic leakage was observed in 14 patients (6.1%) in the SDD group and in 22 patients (9.6%) in the control group (odds ratio) [OR 0.61 (0.30–1.22)]. In the SDD group, fewer patients had one or more infectious complications than in the control group (14.9% (n = 34) versus 26.9% (n = 61), [OR 0.48 (0.30–0.76)]. On multivariable analysis, SDD reduced infectious complications OR 0.472 (0.294–0.755).
Conclusion: SDD reduces infectious complications after colorectal cancer resection but did not significantly reduce anastomotic leakage in this trial.

O002—COLORECTAL—Malignant

INTRACORPOREAL VERSUS EXTRACORPOREAL ANASTOMOSIS DURING LAPAROSCOPIC RIGHT HEMICOLECTOMY. Results FROM RANDOMIZED CONTROLLED TRIAL

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Aims: There are several studies that demonstrate the superiority of the intracorporeal (IA) vs extracorporeal (EA) anastomosis. But most reports are non-randomized, retrospective, and carried out in heterogeneous groups of patients, which might induce patient selection bias.
Methods: We present the first randomized controlled trial, designed to evaluate the two interventions with thorough measurements of the postoperative variables and complications to improve the evaluation of the surgical technique. The primary endpoint is to compare the length of hospital stay. The secondary endpoints were the comparison of intraoperative technical and postoperative clinical events. We included patients aged = 18 years old referred only for right colon cancer and requiring an elective laparoscopic right hemicolectomy.
Results: 140 patients were randomized. The characteristics of the patients were equivalent between groups. Surgical time was longer in IA vs EA (149 ± 27 vs 123 ± 36 min). The length of resected colon was longer in IA vs EA (25.2 ± 5.7 vs 22.6 ± 7.8 cm) with similar number of lymph nodes (19.6 ± 6 vs 19.1 ± 7).The length of wound was shorter in IA (6.7 ± 1.2 vs 8.7 ± 1.4 cm). The postoperative analgesia was lower in IA (39 ± 24.3 vs. 53 vs. 26), and the pain score was lower according to the EVA scale in group IA (1.8 ± 1.8 vs 2.9 ± 2.2). The recovery of digestive functionality was earlier in IA (2.3 vs 3.3 days) with lower incidence of paralytic ileus (13% vs 30%). Postoperative complications according to Clavien Dindo classification were lower in IA: grade I (10% vs 27%); grade II (18% vs 35%); grade III (1.4% vs. 7.2%).
Incidence of anastomotic leak was lower in IA (4.3% vs. 7.14%) with similar wound infection rates (4.3% vs. 4.2%). Hospital stay was similar (5.65 ± 3.7 vs 6.58 ± 4.6 days).
Conclusions: IA in the laparoscopic right hemicolectomy is a surgical option that require a longer surgical time, but which provides a surgical specimen comparable to the extracorporeal anastomosis. IA is associated with lower perception of pain and analgesic requirements. IA is superior in terms of the earliest digestive functional recovery, with a lower morbidity. All these clinical advantages would lead to an earlier recovery.

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P321—HEPATO-BILIAIRY & PANCREAS—Liver

TREATMENT OF HEPATIC ECHINOCOCCAL CYSTS USING OF ARGON PLASMA COAGULATION

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The aim of study was to improve the results of treatment of patients with hepatic echinococcal cysts by using of argon plasma coagulation.

Methods: The analysis of treatment results of 66 patients was put into the basis of this study. It was 12 (18.2%) men and 54 (81.8%) women in total. An average age of them was 47.7 ± 15.9 years.

The main difference between groups was a way of liver parenchyma coagulation in order to make reliable hemostasis. In main group the final stage of surgical intervention on liver was argon plasma coagulation. It was performed to 45 (68.2%) patients. Alternatively, monopolar coagulation was performed to 21 (31.8%) patients (comparison group).

Results: In main group in the 86.6% cases pericystectomy was conducted. The resecting surgeries was performed to 13.4% cases. In comparison group was conducted in 28.6% cases.

In early postoperative period in main group the complications were observed in 4.4% of cases. The same parameter was 4.8% in comparison group. It led to relaparomies.

The forming of external biliary fistulas was observed in 2 (4.4%) patients in main group and in 3 (14.3%) patients in comparison group. However, all the fistulas have closed spontaneously on 7th-10th day in both groups.

Hernias of abdominal wall and peritoneal adhesions that manifested by intestinal obstruction of different degree were considered as complications of late postoperative period. These values were 0% and 4.4% in main group versus 19% and 14.3% in comparison group, respectively.

Conclusion: The resection of hepatic echinococcal cysts with further application of argon plasma coagulation on the cyst bed was accompanied by complications quantity decrease in patients that underwent surgery in early as well as in late postoperative period. In this case more positive dynamics of functional liver values improvements was observed.

P322—HEPATO-BILIAIRY & PANCREAS—Liver

LAPAROSCOPIC LIVER RESECTION WITH SIMULTANEOUS DIAPHRAGM RESECTION FOR COLORECTAL METASTASES

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Background: Liver resection or ablation remains the only chance for cure for patients with colorectal metastases. Simultaneous resection of tumours with invasion to adjacent organs is challenging. In this study we investigate patients who underwent laparoscopic liver resection with simultaneous diaphragm resections.

Methods: From 1998 to 2018, 787 patients with colorectal metastases underwent laparoscopic liver resection. Patients who underwent simultaneous diaphragm resection were identified and included in this study. Perioperative and oncologic outcomes were analysed. The Accordion classification was used to grade postoperative complications. The Kaplan-Meier method was used for survival analyses. The median follow-up was 26 months (range 6–123).

Results: A total 12 patients underwent laparoscopic simultaneous liver and diaphragm resection due to suspicion of tumour invasion to the diaphragm. Histology confirmed the diaphragm invasion in 9 (75%) of these cases. R0 resections was achieved in 11 (92.5%) cases, including 9 (88.9%) cases with confirmed diaphragm invasion. The median operation time was 153 min (range 105–210) and the median blood loss compiled 200 ml (range 20–1200). Two patients developed postoperative complications. The median postoperative hospital stay was 3 days (range 2–14). There were no 90-days mortality in this study. Five-year overall survival was 66%.

Conclusion: Laparoscopic simultaneous liver and diaphragm resection can be performed safely with the good surgical and immediate and long-term oncological outcomes.

P323—HEPATO-BILIAIRY & PANCREAS—Liver

ANALYSIS OF THE FACTORS OF SUCCESSFUL INDOCYANINE GREEN FLUORESCENCE IN LAPAROSCOPIC HEPATECTOMY

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Aims: Indocyanine green (ICG) fluorescence imaging has been reported as a reliable and safe navigation tool in laparoscopic hepatectomy. However, the factors affecting the sensitivity of tumor detection with ICG fluorescence imaging is relatively unclear. The aim of the present study is to analyze the factors of successful ICG fluorescence in laparoscopic hepatectomy.

Methods: This is a retrospective single-center study. This study population consisted of 80 laparoscopic hepatectomies from January 2018 to November 2018 undertaken at Kurashiki Central Hospital. We excluded patients whose tumors were located more than 10 mm from the liver surface, those who did not receive ICG fluorescence imaging, and those who were not injected with ICG dye (0.5 mg/kg) intravenously within 7 days of surgery. The PINPOINT Endoscopic Fluorescence Imaging System was used to detect the tumor location. We evaluated the relationship between successful fluorescence and the timing of injecting ICG before operation, tumor size, ICG R15, liver damage and BMI.

Results: Following exclusion, 15 patients were eligible for analysis. Among the 16 tumors resected, ICG fluorescence imaging detected 9 tumors (56.3%), including 6 hepatocellular carcinomas and 3 liver metastases. ICG fluorescence imaging detected all 9 tumors in the patients injected with ICG 2 to 5 days before hepatectomies . ICG fluorescence imaging detected all 9 tumors which were more than 10 mm in diameter. There was no relationship between indocyanine green fluorescence with ICG R15, liver damage and BMI.

Conclusions: The injection of ICG 2 to 5 days before operation and a tumor size of more than 10 mm can be factors in successful fluorescence in laparoscopic hepatectomy.

P324—HEPATO-BILIAIRY & PANCREAS—Liver

GIANT LIVER CYST MANEGEMENT: A CASE REPORT

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Introduction: Cysts in the liver have a wide variety of aetiologies. It is important to characterize the cystic lesion before treating it. The simple cyst has a low prevalence and is more frequent in women. Fenestration is a useful option for the treatment of simple cysts in selected patients.

Case presentation: A 40-year-old woman was referred to our hospital with a one-year history of intermittent, right upper quadrant pain, with no other associated symptoms. Computed tomography and magnetic resonance imaging showed a large cyst (14,4 x 13,2 cm) in the right of the liver. The cyst presented lobulated morphology, smooth edges and well delimited. There were other smaller cysts in the left lobe. Hepatic function in blood analysis was normal. Biomarkers, tumor markers and hepatitis virus markers were negative. Outpatient follow-up and symptomatic treatment of pain was decided. After six months of follow-up, the pain persisted, so surgical treatment was proposed. A laparoscopic fenestration was performed, widely resecting the free wall of the cyst. There was no evidence of a connection to the bile duct. There were no complications. On 3 days she was discharged.

Discussion: Some giant hepatics cysts become symptomatic due to mass effect. Persistence of pain is an indication of surgical treatment. Laparoscopic fenestration is an alternative for the management of simple hepatic cysts.