complications. A number of 98 (64.47%) patients were subjected to emergency surgery and 54 (35.53%) cases - elective surgery (p<0.001). The operations were completed with the application of primary anastomosis in 104 (68.42%) cases, and in 48 (31.58%) with the application of external derivations, 25 (52.08%) of the patients having metastases. Thus, 14 (29.17%) transversostomies, 12 (25%) sigmostomies, 11 (22.92%) descendostomies, 1 (2.08%) cecostomy and 10 (20.83%) ileostomies were applied. Of the total number of anastomosis performed, 7 (6.25%) were complicated by leakage and 14 (29.16%) patients with stoma developed different postoperative complications (pneumonia, sepsis, DIC syndrome, etc.). The mean hospitalization time was  $15.9\pm1.9$  days in patients with stomas and  $19.41\pm1.45$  in patients with primary anastomosis. Postoperative mortality was 16.45% (n=25), of which 12 (7.89%) with primary anastomosis and 13 (8.55%) with stomas.

Conclusions. The extent of surgery in colorectal cancer depends on the location of the tumor and the clinical manifestations at hospitalization. The obtained results revealed that colon cancer localization rate is significantly higher on the left hemicolon (p<0.001). High proportion of the patients showed signs of obstruction at hospitalization (p<0.001), arguing the significantly higher rate of emergency surgery. Despite no significant differences, the rate of postoperative complications and mortality was higher in the group of patients operated in emergency and with external intestinal derivations.

**Key words:** colorectal cancer, surgical treatment, primary anastomosis, external intestinal derivations

## 136. MANAGEMENT OF PATIENTS WITH ABDOMINAL WOUNDS

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**Introduction**. Modern management of abdominal wounds remains controversial and undergoes continuous re-evaluation. Abdominal wound management varies according to the following factors: mechanism, site, haemodynamics and neurological status, associated injuries and institutional resources.

**Aim of the study.** Analysis of treatment outcomes in patients with abdominal wounds.

**Materials and methods.** A retrospective and prospective study was performed on a group of 89 patients with abdominal wounds treated at the PMSI Institute of Emergency Medicine for the period 01.01.2015 - 31.12.2017. Clinical features and evolution, paraclinical investigations and surgical protocols in patients with abdominal wounds were analyzed.

**Results.** Data analysis revealed: M:F ratio -7.9:1; mean age -  $36.34 \pm 1.3$  years; patients with non-penetrating wounds - 44 (49.4%) and penetrating wounds - 45 (50.6%). Patients with non-penetrating wounds (n = 44) were subject to revision of the wound canal and subsequent primary surgical wound debridement. Haemodynamically stable patients with penetrating wounds without peritoneal signs (n = 18) had the following diagnostic algorithm: abdominal X-ray (17), FAST (17), laparoscopy (4), they underwent primary surgical wound debridement and were admitted for monitoring. Haemodynamically unstable patients with penetrating wounds and with peritoneal or hemorrhagic syndrome (n = 27) followed: abdominal X-ray (14), FAST (15), diagnostic laparoscopy (5), subsequently undergoing emergency exploratory laparotomy, in all cases injuries of intra- and extra-abdominal viscera (32) and blood vessels (3) were detected. Nine (33.33%) patients developed complications after laparotomy in the postoperative period: pneumonia (7), evisceration (1), wound sepsis (1). The duration of hospital stay of patients with non-penetrating wounds was on average  $3.45 \pm 0.3$  days, of nonoperatively treated penetrating wounds -  $2.42 \pm 0.52$ , compared with cases of lesions of the abdominal viscera treated with

curative laparotomy -  $8.2 \pm 1.2$ , (p <0.001). One patient died before laparotomy. Of patients which underwent laparotomy, 3 died (11.11%).

**Conclusions.** Abdominal wound management is of major concern and includes patient selection for different treatment tactics. Haemodynamically stable patients without peritoneal signs require clinical examination and dynamic monitoring, and those haemodynamically unstable with hemorrhagic and peritoneal syndrome - emergency exploratory laparotomy. Differentiated therapeutic attitude leads to avoidance of non-therapeutic laparotomies, decrease of the postoperative complications rate, hospital stay and medical costs.

Key words: abdominal wounds, diagnosis, treatment

## 137. MANUAL VS. MECHANICAL ANASTOMOSIS IN COLON RESECTIONS – ARE THERE ANY RISK FACTORS?

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**Introduction.** Colonic resections with intestinal anastomosis are laborious interventions that require advanced technical skills. Modern technologies provide new equipment and mechanical devices for anastomosis which come to simplify the surgery.

**Aim of the study.** Analysis of the risk factors in colon resections according to the type of anastomosis.

**Materials and methods.** A retrospective study was made with the analysis of the patient's medical history and the operative protocols of 130 patients with colorectal resections completed with anastomosis in the PMSI IEM during 2015-2017. The postoperative evolution of patients with anastomosis was analyzed according to the time of surgery, type of anastomosis (mechanical / manual), type of continuity, location of anastomosis, duration of surgery, age of patients.

**Results.** The results of the analysis were as follows: ratio M:F - 4:5; average age -  $61.45 \pm 1.3$ years. 84 (64.62%) patients underwent resections with manual anastomosis and 46 (35.38%) mechanical anastomosis (p <0.001). 74 (56.92%) patients underwent an emergency surgery, 56 (43.07%) had elective interventions, there was no significant difference between these groups. The postoperative period has evolved with anastomotic leakage in 6 (4.62%) cases: 3 (3.57%) with manual anastomosis and 3 (6.52%) with mechanical (p> 0.05). There were 5 (5.95%) leakage cases in the left colon resections - no significant difference compared to their incidence in the right hemicolectomy - 1 (2.22%). There were no significant differences in the location of anastomosis: of the rectum region 3 (7.69%), colo-colic 2 (4.28%), with ileum 1 (2%). According to the continuity of the anastomosis, two cases of leakage were observed: 6.67% in the termino-lateral anastomosis, 5.56% in the lateral-lateral and 3.13% in the termino-terminal, (p> 0.05). Age did not manifest itself as a risk factor for anastomotic fistula,  $69.33 \pm 4.4$  years in patients with anastomotic leakage compared to  $60.48 \pm 1.36$  in survivors (p> 0.05). Although the duration of the surgery with mechanical anastomosis was less (154.9  $\pm$  9.14min) compared to manual anastomosis (173.47  $\pm$  8.49min), no significant differences were observed, similar to the duration of the operation with favorable evolution compared to the cases of anastomosis dehiscence, respectively  $168.53 \pm 1.36$ min versus  $140.33 \pm 8.8$ min. 12 (9.2%) patients died.

**Conclusions.** Although the rate of manual anastomosis significantly outweighs the mechanical ones in colon resections (p<0.001), there were no risk factors with significant difference regarding the incidence of anastomotic leakage according to the parameters analyzed.

Key words: Colon resections, manual and mechanical anastomosis, anastomotic leakage