LAPAROSCOPIC MANAGEMENT OF GALLSTONE DISEASE IN CHILDREN

The aim of the study was to assess the role of laparoscopic cholecystectomy (LC) in the treatment of pediatric gallstone disease.
Material and methods: the study was based on a retrospective analysis of medical records of 21 children with cholelithiasis treated by laparoscopic cholecystectomy in the "Natalia Gheorghiu" National Scientific and Practical Center of Pediatric Surgery between December, 2015 – March, 2019. The analyzed indices included demographic characteristics, clinical evolution, blood tests, imaging results, operative technique, postoperative complications, postoperative recovery and histological diagnosis.
Results: 21 children with gallstone disease were included in the study (8 boys and 13 girls). The average age was 8,3 years (range 3-17 years). 20 children had symptomatic gallstones and 1 child had asymptomatic cholelithiasis, but he also had hereditary spherocytosis. In 7 children etiologic risk factors for gallstone disease were discovered, the rest of them were with idiopathic cholelithiasis. 17 children had pigmental stones and 4 children had cholesterol stones. The elective laparoscopic cholecystectomy was performed in all children. 18 patients suffered from chronic calculous cholecystitis and 3 children had acute calculous cholecystitis. In one child with concomitant choledocholithiasis the endoscopic papillosphincterotomy was preoperatively performed. The average surgery time was 56.7 minutes (range: 30-90 minutes). There were no postoperative complications. The average length of hospitalization was of 4.3 days (range: 3-6 days).
Conclusion: Laparoscopic cholecystectomy is a safe and efficient method of symptomatic pediatric gallstones treatment.
Key words: Children, cholelithiasis, laparoscopic cholecystectomy.

SEPSIS? VS SEPSIS!

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Consensul internațional Sepsis-3 (2016) de facto a anulat clasificarea precedentă a sepsisului ACCP / SCCM (Chicago, 1991). Totodată, se păstrează definiția sepsisului ca disfuncție acută a organelor din cauza răspunsului dereglat al organismului uman la infecții de variată natură (bacteriene, virale, fungice), manifestată prin inflamație generalizată (sistemică). Sepsisul nu este considerat ca o nosologie separată, ci ca un sindrom caracterizat prin anumite semne clinice și de laborator nespecifice.
Această afirmație contrazice realitățile clinice inerente pacienților cu infecție chirurgicală și principiile de bază ale nosografiei și formulării diagnosticului.
S-a dovedit convingător, că sepsisul chirurgical este cauzat de microorganisme (MO) omniprezente. În anumite condiții (numărul MO, care depășește 100.000 pe 1 g de țesut), factorii patogenitici principali - toxinele microbiene și tisulare și citokinele, sunt produse în focarul primar al infecției.
Pătrunzând în circulația sanguină, ele determină o reacție citotoxică în cascadă, care duce la dezvoltarea imunodeficienței secundare, efectelor citotoxice, sindromului de răspuns inflamator sistemic (SIRS) și a sepsisului. Este bine stabilită corelația dintre numărul de MO în focarul purulent și activitatea fagocitelor atât în țesuturi, cât și în sângele circulant, precum și efectul direct al acestor indicatori asupra evoluţiei bolii. Dimensiunile suprafeței plăgii, precum și calitatea debridării chirurgicale și închiderea precoce a plăgii au un impact direct asupra rezultatelor tratamentului.
Astfel, sepsisul chirurgical este o boală sistemică nespecifică / complicație, care se dezvoltă întotdeauna ca consecinţă a focarului primar al infecției chirurgicale și este de obicei cauzată de OM omniprezente.
Principalele criterii pentru diagnosticul sepsisului sunt următoarele:
- Focarul primar al infecției (suprafață / volum, inclusiv indicele peritonitei Mannheim);
- Focare secundare purulente (singurul simptom patognomonic);
- Febră rezistentă;
- Bacteriemie persistentă (cel puțin 2-3 culturi sanguine pozitive);
- În cele din urmă, SIRS.

Cuvinte cheie: sepsis, SIRS, focarul primar al infecției, microorganisme, citokine

SEPSIS? VS SEPSIS!

International consensus Sepsis-3 (2016) de-facto canceled the former classification of sepsis ACCP / SCCM (Chicago, 1991). However, the definition of sepsis as acute organ dysfunction resulting from dysregulation of the human organism response to infections of various nature (bacterial, viral, fungal), manifested by generalized (systemic) inflammation is preserved. Sepsis is not considered as a separate nosology, but as a syndrome characterized by certain non-specific set of clinical and laboratory findings.
This statement is contrary to the clinical realities proper to patients with surgical infection, and the basic principles of nosography and formulation of diagnosis.
Fundamentally proven that surgical sepsis is caused by ubiquitous microorganisms (MO). Under certain conditions (the number of MO, exceeding 100,000 per 1 g of tissue), main pathogenetic factors - microbial and tissue toxins and cytokines, are produced in the primary focus of infection.
Penetrating into the blood flow, they cause a cascade cytotoxic reaction leading to the development of secondary immunodeficiency, cytotoxic effects, systemic inflammatory response syndrome (SIRS) and sepsis. It's well established the correlation between the number of MO in purulent focus and the activity of phagocytes both in the tissues and in circulation, as well as the direct effect of these indicators on the outcome of disease. The size of the wound surface, as well as quality of surgical debridement and early closure of the wound have a direct impact on the treatment results.
Thereby, surgical sepsis is a systemic non-specific infectious disease / complication, that always develops due to primary focus of surgical infection and is usually caused by ubiquitous MO.
The main criteria for the diagnosis of sepsis are as follows:

- Primary focus of infection (area / volume, including Mannheim peritonitis index);
- Secondary purulent foci (the only pathognomonic symptom);
- Resistant (remitting) fever;
- Persistent bacteremia (at least 2-3 positive blood cultures);
- And finally, SIRS.

Keywords: sepsis, SIRS, primary infectious focus, microorganisms, cytokines

PERORAL ENDOSCOPIC MYOTOMY AFTER OPERATIVE INTERVENTIONS ON THE GASTROESOPHAGEAL JUNCTION

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Introduction: Per oral endoscopic myotomy (POEM) may be a challenge in patients with previous interventions on the esophageal-gastric junction. The degree of fibrosis in submucosal space plays a key role in the feasibility and safety of tunnel technique.
Aim: To evaluate the safety of per oral endoscopic myotomy in patients previously operated on the esophageal-gastric junction.
Material and methods: Between July 2014 and May 2018, 123 patients underwent POEM in the Moscow Clinical Scientific Center, including 46 (37%) patients previously operated on the esophageal-gastric junction. The group of operated patients involved 41 (89%) patients after pneumatic balloon dilation, 3 (6.5%) patients after Heller myotomy, 1 (2%) patient after previous esophagogastroplication, 1 (2%) after POEM.
Results: The POEM procedure was successfully completed all patients. The mean operative was comparable in both groups: 106 min (55-195 min) in previously operated patients and 103 min (45-180 min) in naïve patients. F0 degree was detected in 14 (30%) cases, F1 in 29 (63%), maximal fibrosis (F2) in 3 (6.5%) patients who had previously undergone pneumatic balloon dilation. In patients after Heller's myotomy and esophagogastroplication, the degree of fibrosis reached F1, despite the expected more pronounced fibrosis. In the group of primary patients F0, the degree was detected in 27 (35%) observations, F1 - 46 (60%), severe fibrosis (F2) was detected in 4 (5%). There were no intraoperative complications affecting the tactics of surgical intervention in one observation. There were no major bleeding episodes requiring blood transfusion in either group. In one case in the group of previously operated patients, a mucosal defect was detected after the formation of the tunnel. The lesion was clipped.
The technical success of the surgical intervention was up to 100%. There were no intraoperative complications. X-ray examination on the 1st day after intervention with a water-soluble contrast showed appropriate evacuation and no leakage. Patients were discharged the 2nd day after surgery.
Conclusions: The history of failed previous surgical interventions is not a contraindication to the POEM procedure and does not significantly affect the course of surgical intervention.
Keywords: Per oral endoscopic myotomy, previous surgical interventions, esophageal-gastric junction

THE ORGANISATION OF USING VIDEOLAPAROSCOPY IN MILITARY FIELD HOSPITAL IN CONDITIONS OF ANTI-TERRORISTIC OPERATIONSIN EASTER UKRAINE

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Background: Improvement of the medical support for injured in the region of anti-terroristic operation by using endovideo surgical techniques in the hospitals of the 2-3nd Echelon.
Methods and materials: In June 2014 mobile military hospital was set up for providing qualified surgical help to warriors in the region of eastern Ukraine. 1460operations (62 laparoscopic) were carried out during first 9 months.
Results: We use data of 23 patients suffered under abdomen and pelvis injuries: 18 had missile and gunshot wounds, 5 had closed traumas. Acute diseases of the abdomen cavity were diagnosed 39 patients. The penetrative character of shoot wound was excluded by 6 patients using the diagnostic laparoscopy. Out of 5 patients with closed traumas of abdomen, injuries of internal organs were identified in 2 cases, operations were finished laparoscopically. Suffering from urgent diseases of the abdomen cavity organs, 10 patients underwent the laparoscopic appendectomy for acute appendicitis; 2 persons - the laparoscopic diverticulectomy for Meckel's diverticulitis; in 3 cases the ovarian apoplexy and haemoperitoneum were detected during the laparoscopy, the laparoscopic resection of ovarium was performed; 1 patient underwent laparoscopy for pancreonecrosis, 20 laparoscopic cholecystectomy for acute calculous cholecystitis; one laparoscopic cholecystectomy for cancer of the pancreas, obstructive jaundice; 2 patients had laparoscopic suturing of perforative ulcers in duodenum.
Conclusion: Well-founded approaches of treatment and diagnosis of shoot wounds of abdomen and pelvis by using the video laparoscopic equipment in the field conditions (first time in the Ukrainian history) were performed. Application of the endovideo surgical technics allowed avoiding 20 useless laparotomies.
Keywords: Laparoscopy; Injury; Mobile field hospital