

MICROBIOLOGICAL AND EPIDEMIOLOGICAL FEATURES OF MICROBIAL ASSOCIATIONS IN SEPTIC INFECTIONS IN SURGICAL DEPARTMENTS

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Introduction: The problem of septic infections (SI) is still an actuality, despite the positive developments in the fight against infectious diseases

Objective: The study of the microbiological and epidemiological characteristics of poly etiology of purulent-septic infections in surgical patient's general hospital

Materials and methods: Isolation and identification of microorganisms was carried out by conventional methods. To identify clinical and epidemiological features performed a retrospective analysis of incidence, according to official registration in the recording and reporting hospital.

Results: 108 strains of microorganisms were allocated, belonging to the 11 species. Among Associates dominated by *Staphylococcus aureus* (35,18%), *Acinetobacter baumannii* and *Staphylococcus epidermidis*. *Acinetobacter baumannii* and *Staphylococcus epidermidis* predominated, and among Associates among monocultures. *Enterobacter agglomerans*, *Proteus mirabilis* recorded only in the association. For surgical patients the most frequent combination of established *S.aureus*, *Staphylococcus epidermidis* among themselves, as well as *E.coli*, *Proteus spp.*, *Enterococcus spp.* Most species of microorganisms occurred mainly in the form of associations. In general surgery the figure was equal to 64.3%, dominated by two-component association. The number of multidrug-resistant crops amounted to 25,1% (*Acinetobacter baumannii*, *Staphylococcus aureus*, *Enterobacter agglomerans*). Jaccard coefficient was highest for *Staphylococcus aureus Staphylococcus epidermidis* (68,9%) and *Staphylococcus aureus c Acinetobacter baumannii* (47,5%), which corresponds to the synergistic relationship. And in the associations and *Staphylococcus epidermidis Acinetobacter koeffitsient* 17.1 – has an antagonist relationship. The neutral attitude prevailed over the synergistic and antagonistic. The average incidence of polyetiology infections was 17 per 100. As a result of the study, the following clinical and epidemiological features of polyetiology of infections in surgical patients and risk factors for their development: the leading pathology in polyetiology infections - skin and subcutaneous tissue (70%). The age structure of patients was predominantly older age group (42 to 60), and the average age of the patients was 54. The main type of surgery - opening abscesses, phlegmon, limbs amputation. Poly etiology of infections in patients had more surgical interventions (70.1%) and it was found that more patients with infections were poly etiology necrectomy.

Duration of hospital stay was 13.4 days on average. The intensity of the ABT was primarily a course.

Conclusions: Organization of the microbiological monitoring of poly-etiology SI, is a necessary part of the surveillance of hospital infections.

Key words: purulent septic infections, association, epidemiological surveillance.

PECULIARITIES OF DIAGNOSTIC AND TREATMENT OF THE DIVERTICULAR DISEASE OF THE COLON

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Introduction: Diverticular disease is one of the most prevalent medical conditions that affect Western populations. Symptomatic diverticula can lead to serious complications requiring both medical and surgical interventions to treat these complications when they occur. Imaging is used to establish the diagnosis and its extent and severity, and to detect the presence of any complications so that management can be directed appropriately. The most widely used examinations for the diagnosis of diverticulitis are barium enema, ultra-sound, and computed tomography. Goals of therapy should focus on alleviating symptoms in symptomatic disease and preventing recurrence and complications. The indications for emergency operative treatment include generalized peritonitis, uncontrolled sepsis, uncontained visceral perforation, the presence of a large abscess, and lack of improvement or deterioration within 3 days of medical management. Complications of chronic diverticulitis, including fistulas, strictures or stenosis, and most cases of colonic obstruction, are also treated surgically.

The aim: To elaborate an algorithm of diagnostic and treatment in diverticular disease of the colon (DDC). To establish the efficiency of operative techniques in surgical treatment.

Material and methods: 27 patients (14 males and 13 females), average age $65,2 \pm 10,9$, diagnosed with diverticular disease of the colon were included in the research. Depending on presence of complications, therapeutic or operative treatment was used.

Results: Age, obesity and lifestyle are the most important factors in pathogenesis of diverticular disease of the colon. It was noted an increased incidence of DDC and its complications in age decades 50-60 and 61-70. It was proposed to include in the mandatory set of methods for diagnostic of DDC barium enema (95% of sensibility), colonoscopy (84% of sensibility), as well as ultrasound and computed tomography as additional methods for identification of complications. In 10 patients (37%) was used therapeutic treatment and 17 patients (63%) required surgical intervention, the most frequent being sigmoid resection (34%). Complications after operation were registered in 4 patients (23%).

Key words: diverticular disease of the colon, therapeutic treatment, operative treatment, sigmoid resection.

RELATIONSHIP OF LITHOGENESIS AND OXIDATIVE DAMAGE IN EXPERIMENTAL NEPHROLITHIASIS

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Introduction: Modern literature indicates that tissue damage in the kidneys is an important factor in the formation of urinary stones. It is recognized that the deposits of calcium salts are capable of inducing tissue reactions in the epithelium of the distal tubules and collecting tubules, particularly activating the process of free radical oxidation.

Material and Methods: The morphological study of 60 rat kidneys with experimental oxalate nephrolithiasis was conducted. To identify the calcium deposited, silver impregnation by von Kossa's method was used. Using immunohistochemistry, the expression of the severity indices of oxidative damage (malondialdehyde – MDA) and antioxidant defenses (mitochondrial superoxide dismutase – SOD-2) were determined.

Results: After 3 weeks of the nephrolithiasis modeling in the epithelium of the collecting tubules, in the interstitium of the medulla substance, in the lumen of collecting tubules numerous calcium deposits were found (mean $21,4 \pm 3,40$ in the field of view). The average size of the deposits was observed to be