

DYNAMICS OF INTERNAL CONTAMINATION BY INTESTINAL ORGANISMS IN EXPERIMENTAL ACUTE PANCREATITIS

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Introduction. Infection of the pancreas and parapancreatic fiber is the most severe and prognostically unfavorable complication of acute pancreatitis (AP), in which mortality is 50-70%. Most microorganisms, involved in infectious and inflammatory processes, are of enteric origin, indicating the crucial role of intestinal microflora in bacterial contamination of internal organs in the development of infectious complications of AP. **Materials and methods.** The experiments were conducted on 70 white rats weighing 200-220 grams. AP was induced by intraperitoneal introduction of L-arginine according to Mitsunum's method. Determination of a specific translocant composition and their identification was performed using a standard procedure. Statistical analysis of the study results was performed using Student's t-test and F-tests as well. **Results.** In the form of destructive AP after 6 h of induction the monoculture E. coli in the portal blood and mesenteric lymph nodes was detected. Later the frequency of microorganisms allocation was increased and after 24 h all experimental rats had positive bacterial growth in their internal organs. After 12 h, the portal blood of 58% of the animals was discharging opportunistic pathogenic E. coli and S. epidermidis in monoculture and after 24 hours - in 100% of them it was combined with K. pneumonia, E. faecalis and B. fragilis. Within 72 and 96 h the bacteremia level dropped and after 120 hours the portal blood was sterile in all observations. **Conclusions.** In the destructive form of AP bacterial translocation begins after 6 h into the portal blood and mesenteric lymph nodes in 13.4% of animals, becomes massive after 24-48 hours in all internal organs and lasts up to 168 hours in lymph nodes of the peritoneal cavity and the spleen. The main causative agents are the pathogenic and opportunistic pathogenic strains of E. coli, S. epidermidis and S. aureus combined with K. pneumonia, B. fragilis.

ESCHERICHIA COLI - FREQUENT CAUSE OF NOSOCOMIAL INFECTIONS

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Introduction: Escherichia coli holds the main role in the etiology of hospital infections, being isolated in the intensive care services, from genital infections, infections of surgical wounds, etc. The purpose of this study is to highlight the nosocomial potential of E. coli in various surgical and medical services, as well as establishing the phenotypes resistant to antibiotics/chemotherapeutics, in order to prevent the selection of strains multi resistant to anti-infectious chemotherapeutics. **Materials and methods:** The study has been done on biological samples harvested from 8.700 patients that presented themselves for microbiological investigations in the Medical Analysis Laboratory and from the hospitalized patients in the Anesthesiology and Intensive Care services, Urology, Surgery, Orthopedics, Diabetes and Nutrition Diseases, of the County Clinical Emergency Hospital Of Craiova, in the period between 2010 and 2012. **Results:** A high morbidity has been noticed, caused by infections with E. coli, in a percentage of 73,54% in the hospital environment and 89,05% in the Ambulatory Service. E. coli has been isolated from different biological samples: urine, throat swab, nasal swab, bronchial aspirate fluid, ascites fluid, peritoneal fluid, pleural fluid, synovial fluid, pus, blood, sputum, secretions (bile, cervical, ear, wound, ocular, lingual), CSF. The results of the anti-infectious chemotherapeutics sensitivity testing have permitted the establishment of some resistant phenotypes, which are more frequent in the case of E. coli strains from the hospital environment, rather than the strains from the Ambulatory Service. **Conclusions:** Establishing which strains are resistant to anti-infectious chemotherapeutics is necessary in a medical institution, in order to select the efficient therapy and to prevent the selection of multi-resistant strains.

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