

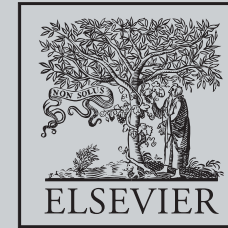
Pancreatology

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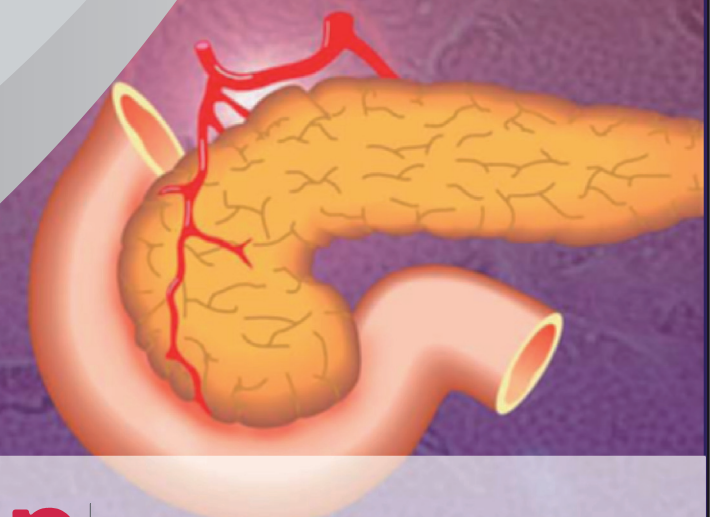
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Pancreatology

Proceedings of the 54th meeting of the European
Pancreatic Club
(held virtually 22-25th June 2022)



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Pancreatology

Aims and Scope

'Pancreatology' is the official journal of the International Association of Pancreatology (IAP), the European Pancreatic Club (EPC) and several national societies and study groups around the world. Dedicated to the understanding and treatment of exocrine as well as endocrine pancreatic disease, this multidisciplinary periodical publishes original basic, translational and clinical pancreatic research from a range of fields including gastroenterology, oncology, surgery, pharmacology, cellular and molecular biology as well as endocrinology, immunology and epidemiology. Readers can expect to gain new insights into pancreatic physiology and into the pathogenesis, diagnosis, therapeutic approaches and prognosis of pancreatic diseases. The journal features original articles, case reports, consensus guidelines and topical, cutting edge reviews, thus representing a source of valuable, novel information for clinical and basic researchers alike.

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The **International Association of Pancreatology (IAP)** is a unique international organisation established in 1985 and devoted to basic and clinical understanding of pancreatic functions and diseases. It is an assembly of basic scientists and clinical investigators dedicated to explore pancreatic biology in order to improve treatment outcomes in a variety of pancreatic disorders.

The four major objectives of the IAP are:

1. To promote and encourage the advancement and exchange of knowledge respecting the normal and diseased pancreas by means of regular international meetings.
2. To advance and encourage studies in basic and clinical research in Pancreatology by meetings and official publications.
3. To promote public interest in Pancreatology.
4. To make known the objectives and activities of the Association by the publication of its activities in a range of media including the regular publication of its Journal.

The **European Pancreatic Club (EPC)** is a non-profit, international scientific organization dedicated to the study of the pancreas. EPC was founded in 1965, with the idea to bring together basic scientists and clinicians in an informal atmosphere to promote friendship and research communication between them. Therefore, EPC has provided a platform for pancreatologists for 47 years. EPC has strong connections with various European National Pancreatic Societies (from 22 countries).

The main aims of the EPC are to:

1. Expand knowledge of pancreatic diseases
2. Promote basic and clinical research
3. Provide a scientific platform for pancreatologists
4. Conduct clinical and scientific education

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of this survey appear to emphasize that attention also needs to be placed on the implementation and adoption of these well-developed guidelines. Feeding and nutrition appear to require the greatest need for wider adoption, but the use of prophylactic antibiotics and timing of cholecystectomy should be improved.

Clinical approach to the correction of nutrient deficiency in chronic pancreatitis in middle-aged patients

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Introduction: Chronic pancreatitis (CP) is a disease that progresses to nutritional deficiencies.

Purpose: To study the effectiveness of the inclusion of a vitamin-mineral composition containing probiotic cultures in the complex treatment of chronic pancreatitis in middle-aged patients. Materials and methods. Examined 86 patients with CP, average age - (59.32 ± 4.33) years. All patients received a standard treatment complex (C): pantoprazole 40 mg on an empty stomach on demand, continuous enzyme replacement therapy (T) with pure pancreatin in an adequate dose with each meal, prokinetics or antispasmodics if necessary. Group I (22 patients) took C for two months.

Materials and methods: Subgroup II (39 patients), in addition to , received a probiotic-vitamin-mineral complex (Bion 3), 1 tablet once a day for 6 weeks. The control group consisted of 25 patients without signs of pathology of the digestive system, comparable in age. The assessment of clinical and biochemical blood parameters was carried out according to generally accepted methods. The function of exocrine insufficiency (EI) of the pancreas (P) was determined by the level of fecal -elastase (FE) by enzyme-linked immunosorbent assay. Statistical analysis was performed according to state standards and guidelines for medical statistics using Excel.

Results: Normalization of pancreatic function was noted in 3 (13,64%) patients of group I and in 9 (23,07%) patients of group II (p<0.05). Addition of treatment with Bion 3 promoted an increase in the level of serum iron by 22,91%, total protein by 8,39 %, and a decrease in the level of transferrin by 11,85% (p0.001), an increase in the level of erythrocytes, saturation of transferrin with iron by 13,25 and 28,33% (p0.003), and hemoglobin - by 6,13% (p0.05). Complex treatment with the inclusion of Bion 3 has a moderate effect on the excretory function of the pancreas, which made it possible to reduce the number of patients with a moderate degree of PI by 20,52%.

Conclusions:

Additional inclusion of a probiotic vitamin-mineral complex in the TC promoted a significant improvement in the parameters of anemic syndrome in middle-aged patients with CP, as well as a higher reliable correction of the excretory function of the pancreas according to the PE level.

Correlation between abdominal perfusion pressure and timing of infection of pancreatic necrosis in patients with acute severe pancreatitis

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Introduction: An essential determinant of acute pancreatitis (AP) severity is the dynamics of complications that develop in the beginning of the disease amid microcirculatory disorders. Secondary infection among this category of patients significantly aggravates the prognosis of the

disease. Early infection of pancreatic necrosis (PN) is the leading cause of fatal septic complications in patients with acute severe pancreatitis (ASP) in its late phase. The marker of organ perfusion is the abdominal perfusion pressure (APP).

Purpose: To study the relationship of APP in the first week of the disease with the timing of infection of PN in patients with ASP.

Materials and methods: A retrospective, cross-sectional, single-center study was performed. 74 patients with ASP (median age 47 (41 - 54) years) were studied. Among them, men comprised 51%, women 49%. In all patients, the level of APPmin was assessed in the first week of the disease, as the difference between mean arterial pressure (MAP) and intra-abdominal pressure (IAP). All patients had infectious complications of acute necrotizing pancreatitis. Positive bacteriological culture of aspirate of acute liquid parapancreatic accumulations registered for the first time, corresponded to the period of infection of PN. A correlation analysis of the relationship between APP in the first week of disease and the period of infection of PN from the onset of the disease was conducted (Spearman's Rank correlation coefficient)

Results: The analysis found that the median (QI II QIII) APPmin was 62 (50 II 72) mm Hg; MAP - 74.5 (70 - 80) mm Hg; IAP - 12 (11 - 18) mm Hg. The median of the onset of infection corresponded to 11 (8 II 16) days of illness. Mortality was 34%. A negative correlation between the APPmin during the first week of the disease and the timing of infection in patients with ASP (= 0.88, p <0.01) was found.

Conclusions: A strong negative correlation between the level of APP in the first week of AP and the timing of infection of PN (= 0.88, p <0.01) indicates the influence of perfusion disorders in the early phase of the disease on the timing of infection PN.

Comparison of presepsin and procalcitonin for prognosis of infectious complication of acute necrotizing pancreatitis

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Introduction: Early determination of the high risk for infection occurrence in patients with acute necrotizing pancreatitis (ANP) is crucial for their effective treatment. Several markers were established for early diagnosis of its development, presepsin and procalcitonin was most promised.

Purpose: Aim of research was to compare utility of presepsin and procalcitonin determination for prognosis of subsequent development of infected complications of ANP.

Materials and methods: Prospective study of 115 patients with suspected infected ANP admitted to single intensive care department has been performed. Level of presepsin and procalcitonin in patients with system inflammatory response syndrome (SIRS) lasted longer than 1 week was estimated every 3rdII5th day until invasive treatment was applied. Bacteriological investigation of acquired material served as criteria for diagnosis of infected necrotic collections.

Results: Bacteriological investigation of necrotic collections confirmed infection presence in 80 (69.5%) patients. The rate of presepsin was significantly higher in the patients with infected complications than those in the individuals with sterile pancreatic necrosis with cut-of level above 632 pg /ml of at time of invasive procedure (0.956, p0.001), 457 pg/ml II within week before decision of its application (0.916, p0.001) and 403 pg/ml (0.876, p0.05) II in case of prolonged SIRS. Procalcitonin level reached