

Original article

Analysis of Treatment-Related Factors Affecting Mortality in Patients with Severe Necrotizing Acute Pancreatitis

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SUMMARY

The aim of the paper was to determine the factors related to the initial therapy that may contribute to death from severe necrotizing acute pancreatitis and to analyze their clinical importance as well as possible additive effects.

A retrospective case-control study included all adult patients treated for severe necrotizing acute pancreatitis in the Clinical Center of Kragujevac, Serbia, during the five-year period (2006-2010). The cases (n = 41) were patients who died, while the controls (n = 69) were participants who survived. In order to estimate the relationship between potential risk factors and observed outcome, crude and adjusted odds ratios (OR) with 95 % confidence intervals (CI) were calculated in logistic regression models.

Significant association with observed outcome was shown for the use of gelatin and/or hydroxyethyl starch (adjusted OR 12.555; 95 % CI 1.150-137.005), use of albumin (adjusted OR 27.973; 95 % CI 1.741-449.373), use of octreotide (adjusted OR 16.069; 95 % CI 1.072-240.821) and avoiding of enteral feeding (adjusted OR 3.933; 95 % CI 1.118-13.829), while the use of nonsteroidal anti-inflammatory drugs had protective role (adjusted OR 0.057; 95 % CI 0.004-0.805).

The risk of death in patients with predicted severe necrotizing acute pancreatitis could be reduced with avoidance of treatment with colloid solutions, albumin and octreotide, as well as with an early introduction of oral/enteral nutrition and use of nonsteroidal anti-inflammatory drugs.

Key words: pancreatitis, acute necrotizing, risk factors, death, albumin

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