

The Current Surgical Management of the Parietal Defects in Patients with Liver Cirrhosis - Options and Limits. Our Experience and Review of Literature

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Abstract

Introduction: The abdominal wall hernias in patients with liver cirrhosis have a significant higher prevalence than those in non-cirrhotic patients. The best surgical treatment option and the optimal operative time still represent a subject of debate.

Material and method: We have retrospectively analyzed the cases of abdominal wall hernias in patients with liver cirrhosis admitted in the Surgical Department of the "Sfântul Pantelimon" Clinical Emergency Hospital from Bucharest, undergoing surgical treatment between January 2012 and December 2016. Data regarding the laboratory results (the serum albumin and bilirubin levels, the Prothrombin Time) and the clinical aspects (the presence of ascites or encephalopathy) that helped establish the grade of the disease according to Child classification system, and, also, the information regarding the type of hernia, the character of the surgical indication (emergency or elective), the surgical technique and the postoperative evolution have been collected from the medical documents of the patients included in the present study. The statistical analysis has been made using the chi-square test.

Results: 32 cases out of the total 65 patients included in the study, that underwent surgical intervention for the treatment of the abdominal wall defects, had umbilical hernia (49,23%), 18 cases presented with inguinal hernia (27.69%), 11 with incisional hernia (16.92%) and 4 with epigastric hernia (6.15%). 29 patients were subjected to elective surgery (44.6%) and 36 to emergency surgery (55,4%). Regarding the Child classification system used in the present study, 24 patients presented with Child A grade of cirrhosis (36.92%), 30 with Child B (46.15%) and 11 with Child C (16.92%). The postoperative morbidity rate was 45,83% in Child A group, 56,66% in Child B group and 81,8% in Child C group. The mortality rate was 4,16% in the Child A group (one death), 13.33% in the Child B group (4 deaths) and 72.72% in Child C group (8 cases). The highest mortality rates have been registered in patients that underwent emergency surgical intervention.

Conclusions: The parietal defects in patients with liver cirrhosis can be surgically treated with satisfactory outcomes. The best results have been registered in patients with compensated form of the cirrhosis or in cases undergoing elective surgery. The methods used for the surgical treatment of the abdominal wall defects vary from herniorrhaphy to alloplastic techniques. For patients with ascites, a good control of this complication represents an important factor for the favourable postoperative evolution. The emergency surgical interventions are associated with greater risks of morbidity and mortality.

Key words: abdominal wall, hernia, cirrhosis, ascites