Appropriate Management of Splenic Trauma


Abstract- Introduction: Inappropriate management of splenic trauma is related to high rates of morbidity and mortality, and an effective understanding of its mechanisms is vital. Closed abdominal or thoracoabdominal trauma, such as localized contusions from various incidents, is typically the cause of splenic injuries. Splenic trauma must be promptly evaluated in the context of urgency, and a surgical approach must be performed according to the degree of injury.

Methods: This is a retrospective, quantitative, and cross-sectional analysis of the medical records of operated-on patients.

Keywords: splenectomy; advanced trauma life support care; traffic trauma care.

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Abstract - Introduction: Inappropriate management of splenic trauma is related to high rates of morbidity and mortality, and an effective understanding of its mechanisms is vital. Closed abdominal or thoracoabdominal trauma, such as localized contusions from various incidents, is typically the cause of splenic injuries. Splenic trauma must be promptly evaluated in the context of urgency, and a surgical approach must be performed according to the degree of injury.

Methods: This is a retrospective, quantitative, and cross-sectional analysis of the medical records of operated-on patients.

Results: The medical records of 50 patients were analyzed, scored, and selected based on the following variables: mechanism of trauma, clinical signs of splenic injury, splenectomy as an emergency approach, degree of injury, postoperative period, complications, sequelae, and length of stay after surgery, as well as the need for intensive care unit admission and mortality. Data from 50 medical records of patients undergoing urgent splenectomy allowed researchers to draw the conclusion that 48% of patients had experienced splenic trauma as a result of auto accidents, and 38% of patients had Kehr's sign. Additionally, it was determined that grade III–V injuries were the most common in 70% of the cases submitted for urgent splenectomy after an anatomopathological investigation. Further, localized abscesses, the most common type of complications, were present in 50% of the patients. The average length of stay was 8 days, and 38% of the patients needed an intensive care unit. Finally, it was possible to conclude that 10% died. In terms of care, a profile has been established in which a direct and effective approach is required because, when compared with current literature, the number of patients with complications is very low when compared to patients approached conservatively, who present a degree of sequelae of 70% depending on the degree of injury.

Conclusion: As a result, the demand for more effective policies that aim to reduce morbidity and mortality is reinforced. This is critical given the high frequency of instances.

Keywords: splenectomy; advanced trauma life support care; traffic trauma care.

I. Introduction

High rates of morbidity and mortality are associated with inadequate therapy for splenic trauma, requiring an in-depth comprehension of its mechanisms. The most common cause of splenic injuries is confined abdominal or thoracoabdominal trauma, such as contusions resulting from a variety of accidents.

Splenic trauma must be promptly evaluated in the context of urgency, and a surgical approach must be performed according to the degree of injury. The comprehension of splenic trauma demands the comprehension of crucial aspects, such as the function and cause of the spleen's increased involvement, as well as the management necessary to prevent complications and sequelae.

In addition, there is a correlation between high rates of morbidity and mortality and the frequency of abdominal trauma, with the spleen being the most commonly damaged organ. The most common cause is trauma caused by accidents or being run over. A patient with a splenic injury must be evaluated and, if necessary, a surgical procedure performed. The surgical operation is urgent to prevent and permit a decrease in morbidity and death since the majority of patients underwent surgery after a parenchymal laceration measuring more than 3 cm confirmed the lesion.
II. METHODS

This is a retrospective, quantitative, and cross-sectional analysis of the medical records of the operating patients. The objective of this study is to examine the epidemiology and clinical condition of patients undergoing urgent splenectomy, as well as the most common complications associated with the procedure. The trial design and baseline patient information were not published since they were kept confidential. Before being approved for production, the study was conceived at the hospital and supervised by the regional Ethics and Research committee. There are no sponsors for the study. The authenticity of the trial as well as the quality and comprehensiveness of the data and analyses are all guaranteed by the authors.

III. RESULTS

During the time period analyzed, a preponderance of males was observed among patients assisted with urgent splenectomy. The "Trakcare" system, which is used in patient care services at secondary hospitals in the Federal District, was the foundation for the collection of secondary data used in this study.

The medical records of 50 patients were analyzed, scored, and selected according to the following variables: mechanism of trauma, clinical signs of spleen injury, splenectomy as an emergency approach, degree of injury, postoperative period, complications, sequelae, and length of stay after surgery, as well as the need for an intensive care unit and death.
Data from 50 medical records of patients undergoing urgent splenectomy allowed researchers to draw the conclusion that 48% of patients had experienced splenic trauma as a result of auto accidents, and 38% of patients had Kehr’s sign in the positive range.

Additionally, it has been found that grade III to V injuries were the most common in 70% of the cases submitted requiring urgent splenectomy after an anatomopathological investigation.

Among the complications, 50% of the patients had localized abscesses, the most frequent form.

The average duration of stay was eight days, and 38% of patients required intensive care.

Lastly, 10% of the population passed away.

Concerning care, a profile was perceived in which a direct and effective approach is required, because the number of patients with complications is very low when compared to patients approached conservatively, presenting a degree of sequelae of 70% depending on the degree of injury.

IV. Conclusion

In order to prevent sequelae and improve these patients' chances of survival, it is inferred that there is a strong demand for appropriate surgical therapy. This highlights the need for more effective measures that aim to reduce morbidity and mortality, which is crucial given the high frequency of occurrences.

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