

SPLEEN CLOSED TRAUMA: SURGICAL TREATMENT VERSUS CONSERVATIVE TREATMENT

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Introduction. In closed trauma of the most frequent causes of injuries are haemoperitoneus of parenchymatous organs such as liver and spleen. **Patients and methods.** *Clinical Case No.1.* R.F. (spleen injury: 2nd degree sec. Moore, 1st degree sec. Buntain WL, Tc-based score of 2) is subject to clinical monitoring with ultrasound control, tc, and several blood exams with a satisfactory clinical outcome. *Clinical Case No.2.* A.C. presents a clinical picture attributable to 3rd grade sec. Moore and the 2nd grade sec. Buntain WL with a Tc-based score of 4, therefore, performed emergency splenectomy was not delayed, thus saving the patient at the death. **Results.** The rupture of the spleen is the most frequent complication of closed abdominal trauma (contusion or direct backlash). It appears as isolated lesion in 30-70% of cases. **Conclusions.** In our experience individual spleen injuries, undercapsular that does not involve the hilum and without spillage of liquid peritoneal deserve a conservative, on the other hand, the spleen injury in excess of 4 cm, manyfragments, with spreading of free peritoneal fluid in need of treatment Surgical sudden.

Key words: Spleen, injuries.

INTRODUCTION

In closed trauma of the most frequent causes of injuries are haemoperitoneus of parenchymatous organs such as liver and spleen, as the force trauma, compression of direct or rapid deceleration, can cause a fracture of the parenchyma or capsule that is slightly compressible. The multiple trauma patient has a multiplicity of lesions are usually bone and one or more bodily cavity (intracranial, thoracic, abdominal), with potential or known to or cardio respiratory failure. The immediate survival is linked to the recognition and treatment of traumatic shock (generally-hemorrhagic hypovolemia) and because of the breathing. The arterial hypotension, secondary to hypovolemia from hemorrhage, results in a hypoperfusion of tissue, with possible damage to parenchymal "noble" as the brain, heart and kidney (disturbance of consciousness, mental confusion, heart rhythm disturbances, anuria).

PATIENTS AND METHODS

Clinical Case No. 1. R.F. (spleen injury: 2nd degree sec. Moore, 1st degree sec. Buntain WL, Tc-based score of 2) is subject to clinical monitoring with ultrasound control, C.T., and serial blood exams with a satisfactory clinical outcome. The abdomen U.S. showed: "... hypocoegen uneven area of 4 cm in the lower pole of the spleen, to report a contused wound .. ". You are running with full abdomen C.T. with contrast medium e.v. highlighting: .. "tear lower pole of the spleen that

extends to the region of the hilum, the laceration involves the full thickness of the capsule reaching, low pitch is associated with perisplenic blood ... "" ... no documented significant free fluid in the remaining recesses peritoneal .."

It was agreed to refer the patient clinical monitoring and medical support.

Ultrasound checks are performed every two days and monitoring the blood's values 2 times a day. The conditions of the patient were always stable. In the third day post-traumatic U.S. is performed with contrast medium, indicating: "... bruised outbreak of about 4 cm lower pole rhymes with splenic rupture extended to the medial and diaphragmatic surface of a seat in the capsular however. There is no perisplenic liquid.. "

Proceed with the clinical monitoring and the bed rest for another 5 days, you run further abdomen ECT shows that: "... with u.s. structure not homogeneous splenomegaly charged to the lower pole. Not collected perisplenic .. "Therefore, given the stable clinical condition of the patient, there shall mobilization, introduction of semi-solid diet and discontinuation of therapy with tranex.

In XI-day post-trauma the patient is monitored with C.T. with contrast medium shows that: "... partial healing of the wounds indicated the lower pole of the spleen ... not documented or hemorrhagic fluid spreading in the other examined peritoneal recesses ... ". In the fifteenth day post-trauma the patient is dis-

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charged, and about 1 month of trauma you control CT showing the clinical recovery of the splenic lesion.

Clinical Case No. 2. A.c. presents a clinical picture attributable to 3rd grade sec. Moore and the 2nd grade sec. Buntain WL with a T.C.-based score of 4, therefore, performed emergency splenectomy was not delayed, thus saving the patient from the death. The abdomen C.T. performed emergency to E.R. showed "... laceration of the anterior margin of the spleen with hematoma and fluid in the adjacent seat perisplenic, perihepatic and pelvic excavation.." The U.S. showed: "... at the upper pole of the spleen is a welcome to ultrasonographic structure uneven, extended for about 7x3, 5 cm, from the outbreak bruised" .. free peritoneal fluid was demonstrated in small quantity in right parietocolic lodge and thin flap in the space of Morrison and in left under-freniche.

It was decided to perform an emergency laparotomy. When the peritoneum is finding perisplenic collecting blood from fracture of the upper pole and the lateral portion of the spleen. It runs thus splenectomy and peritoneal washing of the cable with saline. The post-surgical course was characterized by a delay of settlement funnel with medical therapy. The patient was discharged on day X post-surgical conditions in general clinics stable.

RESULTS

The rupture of the spleen is the most frequent complication of closed abdominal trauma (contusion or direct backlash). It appears as isolated lesion in 30-70% of cases. An attempt to repair or conservation is justified by the rare but possible occurrence of post-splenectomy sepsis, even at a distance, mostly by encapsulated bacteria (pneumococcus, strepto-staphylococci, haemophilus, etc).

Diagnosis: ultrasound, angiography, T.C.. Treatment of rupture of the spleen: 1. Non-operative treatment. 2nd Treatment Operational splenectomy, use of biological glues (eg Tissucol), suture, partial resection; self graft. The lesion of the spleen is the most frequent complication of closed abdominal trauma may be determined not only by a direct mechanism bruised feeling in or left thorax behind, but also for backlash for sudden acceleration or deceleration during a quick shift. All this due to the fact that the spleen is a friable, mobile, and richly vascularised in left hypocondrium located, under the rigid costal cage that if on one hand protects it, for another may easily compressible against it by the other viscera and therefore vulnerable to trauma (1).

The spleen injury may be of varying size, in this respect there are several classifications (2):

- CLASSIFICATION SEC. MOORE: grade 1 (lesions or superficial bruises inner-parenchymal not expansive), grade 2 (superficial lesions with low bleeding), grade 3 (deep parenchymal lesions), grade 4 (single or multiple lesions which are opening up the hilum), Grade 5 (Interesting the injury ilo).

- CLASSIFICATION SEC. WL BUNTAIN: Grade 1 (under-capsular hematoma or parenchymal injury without damage), grade 2 (single lesion or multiple lesions with the capsule without parenchymal damage the ILO), grade 3 (deep ILARI fractures with vascular injury), grade 4 (spleen fragmented extraction or hilarious).

Spleen injury scale:

Grade 1: hematoma (under-capsular <10% area), laceration (injury capsular or parenchymal lesion <1 cm depth).

Grade 2: hematoma (under-capsular <10-50% area inner-parenchymal or <5 cm diameter) tear (lesion 1-3 cm parenchymal depth that does not involve the jars).

Grade 3: hematoma (under-capsular > 50% area or expanding; under-capsular parenchymal or broken; inner-parenchymal > 5 cm or expanding) laceration (parenchymal lesion > 3 cm depth or involving the jars).

Grade 4: Tear (or segmental vessels ILARI devascularization with > 25%).

Grade 5: Tear (spleen many fragmetated) vascular laceration (injury with hilarious devascularization)

CONCLUSIONS

Closed abdomen trauma are surgical emergencies that require prompt evaluation and therapy in order to save the life of the patient. In our experience individual spleen injuries, under-capsular that does not involve the hilum and without spillage of liquid peritoneal deserve a conservative, on the other hand, the spleen injury in excess of 4 cm, many fragmented, with spreading of free peritoneal fluid in need of treatment sudden surgery (3).

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