ABSTRACT AND

KEYWORDS

INTRODUCTION

- Liver injuries are common in any high volume trauma center .Our knowledge in its management has improved in the past three decades. Recent advances and minimally invasive techniques play a vital role in the conservative approach. It is very difficult for a trauma surgeon to control massive bleeding occurring in the liver following trauma

- The bleeding structure is very tough to find out, and the crucial period of time to save the trauma victim before the onset of hypothermia, acidosis, and coagulopathy—the markers of an irreversible physiologic insult.

- Usual techniques of elective hepato-biliary surgery like segmental resection do not apply in hostile environment where the timing of intervention is a major factor in saving the life of the patient.

- It is very clear that the management of hepatic trauma has been a formidable challenge to all surgeons

- The evolvement of the management of hepatic trauma over the recent years is a reflection of the rapid understanding of the key parameters deciding the line of management in hepatic trauma

- There were poor outcomes in patients where resection was done but future learning of the injured patient's patho-physiology paved way for the concept of damage control that has been the key in modern trauma management.

- Meanwhile better learning of the outcome of various liver injuries in clinically stable patients has increased the conservative line of approach by using the modern imaging and minimally invasive procedures.

AIMS AND OBJECTIVES

1. To identify clinical and imaging parameters to decide upon the line of management in hepatic trauma

2. To study the clinical course of patients managed conservatively

3. To study the profile of various other associated injuries in liver trauma

MATERIALS AND METHODS

Sample size : 35 cases

Study design : Observational study (Prospective & Retrospective)

Study population : 35 cases

Study period : Oct 2015 to Sep 2016

Study Centre : Madras Medical College and Rajiv Gandhi Government General Hospital , Chennai .

Subject Selection :

Inclusion Criteria:

All trauma victims sustaining blunt and penetrating trauma to the liver with or without associated injuries

Exclusion criteria :

Abdominal trauma with isolated injury to the extra hepatic biliary tree or other visceral structures without liver trauma

ASSESSMENT OF PARAMETERS :

All Patients who fit the inclusion criteria were observed and following data collected

1.Routine blood investigations

-Hemoglobin

- Hematocrit

-Liver Function Test

All these were done serially

2. USG Abdomen

3. CECT Abdomen (i.v. contrast)/plain CT for all cases

4. AAST grading system was the standard methodology to assess severity of liver injury

5. Patients managed conservatively were followed up prospectively and till discharge

6. Conclusions were drawn based on the above parameters

CONCLUSION

- ✓ From this study it is clear that all hemodynamically stable patients can be subjected to conservative line of management irrespective of the grade of the injury

- ✓ Those managed conservatively must be subjected to serial monitoring

- ✓ If there are findings of sepsis like biloma, infected necrosis, liver abscess at any point of time the first option of intervention will be minimally invasive procedures like image guided drainage

- ✓ If there are features of peritonitis then laparotomy must be considered without any delay

- ✓ Non operative management is employed for hemodynamically unstable patients

- ✓ The first step will always be a Pringles maneuver to identify the possible source of bleeding which can be from either the portal

vein or hepatic artery and hemostasis can be achieved by topical hemostatic agents like gel foam etc.

- ✓ If the patients hemodynamic status is in jeopardy then Perihepatic packing serves as the best operative intervention in reversing the patients hemodynamic status to normalcy