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MANAGEMENT OF SOLID ORGAN INJURY

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ABSTRACT

Background- Trauma is a manmade health problem of the modern era which has assumed epidemic proportions. To study the management of solid organ injury.

Methods- Observation study was conducted on 100 Patients admitted with blunt abdominal trauma with solid organ injury with Age >16 Yrs.

Results-7 (14%) of the patients underwent emergency laparotomy because hemodynamic instability.43 (86%) patients were managed non operatively initially but later because of hemodynamically instability 3 patients were converted from conservative to operative management

Conclusion-Blunt trauma abdomen is a challenging entity for every surgeon due to its vague presentation, subtle clinical findings in early cases and rapid deterioration in the condition of the patient. In haemodynamically stable patients with low-grade injuries, conservative management can be tried with careful monitoring. The present trend is towards conservative management and avoidance of negative laparotomies

KEYWORDS : Blunt trauma, Conservative, Operative

INTRODUCTION

Trauma is a manmade health problem of the modern era which has assumed epidemic proportions. Trauma literally means wound or injury, whether physical or psychological. Here the term "trauma" is used to denote physical injury which is defined as damage to the body caused by an exchange with environmental energy that is beyond the body's resilience.[1]

During the past three decades, there has been a major shift from operative to selective nonoperative management of the injured patient. Surgeon's caring for adult patients began to follow the trend initiated by their pediatric counterparts after an increasing amount of evidence supported nonoperative management of great majority of pediatric splenic and hepatic injuries. It was subsequently shown that even the presence of hemoperitoneum and altered mental status do not seem to negate initial nonoperative management in blunt abdominal trauma (BAT), even in patients with higher grade injuries or those of older age[2]

MATERIALS AND METHODS

Inclusion Criterion

Patients admitted with blunt abdominal trauma with solid organ injury with Age >16 yrs.

Exclusion Criterion

1. Patients admitted with penetrating abdominal injury.
2. Patients admitted with hollow viscus injury.
3. Patients with head, chest and orthopaedic injuries that require immediate surgical intervention.

Methods Of Collection Of Data:

After admission of the patient, data for my study were collected by:

1. Direct interview with the patient or patient relatives accompanying the patient and obtaining a detailed clinical history.
2. Thorough clinical examination.
3. Clinical findings and relevant diagnostic investigations performed over the patient.

After enrolment in my study, various clinical examinations, Trauma assessment done and various survey done as per requirement and management in term of investigating and imaging.

RESULTS

Table 1. Clinical Presentation

Clinical features	No. of patients	Percentage
Abdominal pain	48	96%
Abdominal distention	6	12%
Vomiting	19	38%
Tenderness	47	94%
Guarding	20	40%
Rigidity	8	16%
Absent bowel sounds	20	40%
Urinary symptoms	5	10%

Abdominal pain and tenderness were most common clinical presentation associated with blunt abdominal trauma, abdominal guarding was observed in 40% of cases.

Table 2.Treatment

Treatment	No. of patients	Percentage
Conservative	40	80%
Operative	7	14%
Conservative Change to Operative	3	6%

7 (14%) of the patients underwent emergency laparotomy because hemodynamic instability.43 (86%) patients were managed non operatively initially but later because of hemodynamically instability 3 patients were converted from conservative to operative management.

DISCUSSION

Treatment strategy mainly depends on grade of injury, hemodynamic stability of patient, clinical and radiological findings. In present study 80% patients were managed conservatively whereas only 20% patients needed surgical intervention.

Treatment	Percentage (Our study)	Agarwal VK et al[4]	Bhanwar Lal et al[5]	Verma S et al.[6]
Conservative	80%	74.5%	72%	84%
Operative	14%	11.1%	6%	16%
Conservative Change to Operative	6%	14.4%	22%	

Treatment strategy mainly depends on hemodynamic stability of patient, clinical and radiological findings. In present study

maximum patients were managed conservatively because of proper patient monitoring, availability of experienced surgeon, radiologist and good infrastructure. It was observed that most of the patients who came to causality with blunt trauma abdomen to solid organs were managed conservatively because majority of the patients were hemodynamically stable at presentation and during the course in casualty due to dynamic control resuscitation. Because of good infrastructure and availability of advanced monitoring, we succeeded to manage them conservatively. Whereas, whoever we managed operatively were hemodynamically unstable with all deranged parameters and severe grade of injury.

CONCLUSION

Blunt trauma abdomen is a challenging entity for every surgeon due to its vague presentation, subtle clinical findings in early cases and rapid deterioration in the condition of the patient. In haemodynamically stable patients with low-grade injuries, conservative management can be tried with careful monitoring. The present trend is towards conservative management and avoidance of negative laparotomies.

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