

To study modalities for evaluating the abdomen after blunt abdominal trauma & severity of injury

Dr. Sandeep Shrivastava (Asst. Professor)

Dept. of Surgery, Govt. Medical College, Datia (M.P.)

Abstract:

Background & Method: This study carried out in Maharani Laxmi Bai Medical College, Jhansi, Uttar Pradesh. The present study includes 250 cases of blunt abdominal trauma admitted Hospital. On admission to hospital patient's name, age, sex, address, registration number, and, date and time of admission, length of delay in treatment taken noted and Nature of weapon also noted.

Result: Maximum patients come after 1 day of injury 83, i.e. 33.2 % and the minimum of the patients 32, i.e. 12.8% came to hospital in between 8-16 hrs of injury. This duration of injury had recorded from the OPD slip of the patients or the direct enquiry made from patients. There were 51 out of 250 patients (20.4 %) of head injury in BAT patient, 53 out of 250 patients (21.2 %) of chest injury, and 17 out of 250 patients (6.8 %) of Extremity injury, 16 out of 250 patients (6.4 %) of facial injury, and 15 out of 250 patients (6.0 %) of pelvis injury. So it is clear that maximum associated extra abdominal injury in BAT patients is chest > head injury and minimal associated extra-abdominal injury in BAT patients are pelvis injuries.

Conclusion: In all blunt abdominal trauma 61.6 % case account for accidental in nature. RTA is the most common mode of injury in the blunt abdominal trauma. Majority of patients 83, (33.2%) attend emergency department are after 1 day of injury. Most extra-abdominal body region injuries are managed conservatively. Trauma centres should be modernized and fully equipped with emergency drugs and surgical instruments along with adequate manpower.

Keywords: Injury, Modalities, Clinical & Abdominal Trauma.

Study Designed: Observational Study.

1. INTRODUCTION

Trauma (from Greek τραῦμα, "wound") also known as injury,^[1] is a physiological wound caused by an external source.. The term trauma encompasses a wide range of insults to body and it can also be described as "a physical wound or injury, such as a fracture or blow".^[2] Unintentional and intentional injuries were the fifth and seventh leading causes, accounting for 6.23% and 2.84% of worldwide mortalities, respectively in the 2002 World Health Organization estimates of causes of death by rate.

Abdominal injuries comprise a significant proportion of wounds sustained in both military and civilian experience^[3]. The majority of military abdominal injuries are penetrating wounds but in civilian abdominal injuries are rapid acceleration and great momentum predominate, so pattern of visceral injuries is quite different with injury to hollow viscus in military abdominal injuries while solid, parenchymatous organs are more often wounded in civilian abdominal injuries. Concomitant injuries to multiple abdominal organ or to other major anatomical areas (brain /spine/facial/chest/pelvis/extremities) sharply increases mortality and morbidity in abdominal wounds. Also delay in transport to hospital or indefinite treatment is reflected in greater mortality and morbidity. In this respect patient with blunt abdominal injuries are somewhat disadvantaged since there is usually more delay in proceeding to indicated laparotomy than is true in cases of penetrating wounds^[4].

2. MATERIAL & METHOD

This study carried out in the Department of Trauma Centre, Maharani Laxmi Bai Medical College, Jhansi, Uttar Pradesh from Sep 2017 to Aug 2018 patients with Blunt abdominal trauma.

The present study includes 250 cases of blunt abdominal trauma admitted Hospital. On admission to hospital patient s name, age, sex, address, registration number, and, date and time of admission, length of delay in treatment taken noted and Nature of weapon also noted.

If patient was conscious and not under the effect of any narcotic drug or alcohol his presenting complaint, detail history and time of trauma noted mainly pain , vomiting, distension of abdomen, hematuria , air hunger etc. exact site of injury was recorded according to region mentioned.

Injury by blunt object group include patient who sustained injury due to assault by fists and blows, lathi ,iron rods/kicks or received accidental animal kicks over abdomen or got injured due to fall of some heavy object like log ,gravel, got buried in mine or had rolled down the stairs or stumbled over some blunt object.

3. RESULTS

TABLE NO-01: RELATIVE INCIDENCE OF MOT AND TIME LAG

MOT	TIME LAG				
	0-4hr	4-8hr	8-16hr	16-24hr	>1day
RTA	20	25	21	41	46
Assault	4	3	3	5	6
Fall	5	2	5	14	16
Falling blunt Object over body	2	3	5	5	8
Other	2	2	2	2	7
TOTAL	33	35	32	67	83

This table shows that maximum patients come after 1 day of injury 83, i.e. 33.2 % and the minimum of the patients 32, i.e. 12.8% came to hospital in between 8-16 hrs of injury.

This duration of injury had recorded from the OPD slip of the patients or the direct enquiry made from patients.

TABLE NO-02: INCIDENCE OF CONSERVATIVE AND OPERATIVE TREATMENT

INCIDENCE	TOTAL
CONSERVATIVE	134
OPERATIVE	116
TOTAL	250

In patient of BAT treated conservatively is 134, (53.6%) out of which 99(58.2%) in retrospective group and 35(43.75%) in prospective group. In patient of BAT treated operatively 116(46.4%) out of which 71(41.76%) in retrospective group and 45(56.2%) in prospective group.

TABLE NO-03: INCIDENCE OF EXTRA-ABDOMINAL INJURIES

INJURIES	TOTAL
Head Injury	51
Chest	53
Facial	16
Pelvis	15
Extremity	17
Total	152

Table shows that, There were 51 out of 250 patients (20.4 %) of head injury in BAT patient, 53 out of 250 patients (21.2 %) of chest injury, and 17 out of 250 patients (6.8 %) of Extremity injury, 16 out of 250 patients (6.4 %) of facial injury, and 15 out of 250 patients (6.0 %) of pelvis injury. So it is clear that maximum associated extra abdominal injury in BAT patients is chest > head injury and minimal associated extra-abdominal injury in BAT patients are pelvis injuries.

4. DISCUSSION

In this study, blunt injury of abdomen cases accounted for Total 250 cases i.e. (.683%) total admission on surgical side. The incidence of blunt injury of abdomen in the prospective and retrospective group was 170 (.706%) and 80 (.647 %) respectively. Incidence of this nature more obvious in a civilian institution like our in this country.

There were 488 patients with abdominal trauma with 440 penetrating injuries (240 firearm wounds; 200 stab wounds) and 48 blunt injuries in a prospective study of patients with abdominal trauma in one surgical ward at King Edward VIII Hospital in Durban over a period of 7 years, from 1998 through 2004^[5].

One review from the National Pediatric Trauma Registry by Cooper et al reported that 8% of patients (total=25,301) had abdominal injuries. Eighty-three percent of those injuries were from blunt mechanisms^[6].

Retrospective study has been done at Clinical Centre of Serbia, during the period from January 2004. Until January 2009. Blunt trauma (41.7%), gunshot wounds (30.5%), and stab injuries (27.8%). In 24 (66.7%) patients on admission Article in Serbian.^[7]

In our study shows an assessment of various region of body commonly injured. There were 51 out of 250 patients (20.4 %) of head injury in BAT patient, 53 out of 250 patients (21.2 %) of chest injury, and 17 out of 250 patients (6.8 %) of Extremity injury, 16 out of 250 patients (6.4 %) of facial injury, and 15 out of 250 patients (6.0 %) of pelvis injury. So it is

clear that maximum associated extra abdominal injury in BAT patients is chest > head injury and minimal associated extra-abdominal injury in BAT patients are pelvis injuries^[8].

Seven (35%) patients had associated extra abdominal injuries in a retrospective study Ahmadu Bello University Teaching Hospital, Zaria, Nigeria. Twenty one children managed for GIT injuries from blunt trauma from 1984-2002^[2].

5. CONCLUSION

In all blunt abdominal trauma 61.6 % case account for accidental in nature. RTA is the most common mode of injury in the blunt abdominal trauma. Majority of patients 83, (33.2%) attend emergency department are after 1 day of injury. Most extra-abdominal body region injuries are managed conservatively. Trauma centres should be modernized and fully equipped with emergency drugs and surgical instruments along with adequate manpower.

6. REFERENCES

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