ANIL AGGRAWAL'S
Internet Journal of Forensic Medicine and Toxicology
The world's first online journal devoted entirely to forensic medicine and toxicology · Published 1 January and 1 July

VOL. 1, NO. 2
Downloaded from www.anilaggrawal.com · ISSN 0972-8074 (Online) · https://www.anilaggrawal.com/ij/vol_001_no_002/theses/1/6_3.html

6. OBSERVATIONS (PART 3)

6. INCIDENCE OF PENETRATING AND NON-PENETRATING INJURIES

The incidence of penetrating and non-penetrating trauma cases is shown in Table-VI(a) and Figure-V.

TABLE VI(a) :SHOWING INCIDENCE OF TYPE OF TRAUMA

S.NO.	*TYPE OF TRAUMA*	*NO. OF CASES*	*PERCENTAGE O*
1.	NON-PENETRATING TRAUMA (BLUNT TRAUMA)	115	94.26
2.	PENETRATING TRAUMA	7	5.74
	TOTAL CASES	122	

The non- penetrating trauma cases were 115 and penetrating trauma cases were 7 in total 122 cases. The incidence of various penetrating and non-penetrating injuries of abdomen and pelvis is shown in Table-VI(b) and Figure-VI.

TABLE VI(b): SHOWING INCIDENCE OF PENETRATING AND NON-PENETRATING INJURIES OF ABDOMEN & PELVIS. (TOTAL CASES=122)

S.NO.	*AGE GROUPS (IN YRS)*	*NON-PENETR*		
		VEHIC. ACC. (RTA)	FALL FROM HEIGHT (FH)	COLLAPSE OF RO HEAVY OBJE
1.	0-10	2	-	1
2.	11-20	16	1	-
3.	21-30	41	3	1
4.	31-40	17	2	0
5.	41-50	11	1	-
6.	51-60	4	-	1
7.	61-70	8	-	-

8.	71-80	1	-	-
9.	81-90	-	-	1
	TOTAL	100	7	4
	Percentage (%)	81.96%	5.73%	3.27%

It was observed that majority of the injuries were non-penetrating (94.26%), out of which 86.96% of total blunt trauma cases were due to vehicular accidents. Other causes of blunt trauma includes fall from height in 7, collapse of roof/fall of heavy object like machine in 4, assault by blunt weapons in 3 and manual beating in one case. In penetrating trauma category, stab injury accounted for 5 cases. Firearm injury was noticed in remaining two cases.

7. INCIDENCE OF TYPE OF VICTIMS AND OFFENDING VEHICLES IN 100 VEHICULAR ACCIDENT CASES

In the present series, buses caused maximum accidents, i.e., 38 which amounts to 38% of the total cases. The second major killer were the trucks which caused 16 accidents, i.e., 16% of cases. Three wheelers (auto- rickshaws) and two wheelers (scooters/ motorcycles) claimed 3% and 2% of total cases respectively. The Car/Jeep/Taxi(four wheelers) caused 13% of the total cases. In 21 cases, the offending vehicle could not be identified but it was clear that the victims died due to road traffic accidents. In the present series, pedestrians were the worst sufferers. A total of 53 pedestrians were killed in 100 vehicular accident cases. The next common category was the bus occupants which accounted for 13% of the cases. The scooterists/motorcyclists accounted for 12% of total cases. 9% of the victims were three wheeler (auto-rickshaw) occupants. The Car/Jeep occupants accounted for 4% of the cases. Cyclist were killed in 4% of the cases. Rickshaw occupants and Truck/Tempo occupants accounted for 2% of cases each. Handcart puller victim was observed in one case of vehicular accident. The incidence of victims versus different offending vehicles in 100 cases of vehicular accidents is shown in the Table-VII.

TABLE VII: SHOWING INCIDENCE OF VICTIMS VERSUS OFFENDING VEHICLES IN 100 CASES OF VEHICULAR ACCIDENTS INVOLVING ABDOMEN AND PELVIS.
MOST COMMON OFFENDING VEHICLE =BUS
MOST COMMON VICTIM = PEDESTRIAN

S.NO.	*OFFENDING VEHICLES*	TYPE OF VI				
		PEDESTRIAN	BUS OCCUPANTS	TRUCK/ TEMPO OCCUPANTS	CAR/JEEP OCCUPANTS	TSR OCCUPANT
1.	BUS	18	10	-	1	2
2.	TRUCK	7	1	-	2	2
3.	TRAIN	1	-	-	-	-
4.	SELF	-	2	-	-	-

5.	TEMPO	-	-	2	-	-
6.	CAR	4	-	-	1	3
7.	JEEP/TAXI	1	-	-	-	1
8.	SCCOTER/ M. CYCLE	2	-	-	-	-
9.	THREE WHEELER/ (TSR)	1	-	-	-	-
10.	BULLOCK CART	-	-	-	-	1
11.	UNKNOWN VEHICLE	19	-	-	-	-
	TOTAL	53	13	2	4	9

8. INCIDENCE OF VISCERAL INJURIES OF ABDOMEN AND PELVIS

Incidence of various organs involved in abdominal and pelvic trauma in shown in Table-VIII.

TABLE VIII: SHOWING INCIDENCE OF VARIOUS ORGANS INJURED IN 122 CASES OF ABDOMINAL AND PELVIC TRAUMA VICTIMS.

S.NO.	*ORGANS INVOLVED*	*NON-PENET. TRAUMA Cases no. (%)*		*PENET. TRAUMA Cases no (%)*		*T C*
1.	Diaphragm	12	9.83%	4	3.28%	1
2.	Peritoneal haemorrhage	98	80.33%	7	5.74%	1
3.	Retroperitoneal haemorrhage	5	4.1%%	1	0.82%	6
4.	Stomach	5	4.1%	3	2.46%	8
5.	Omentum	21	17.21%	-	-	2
6.	Small Intestines	13	10.65%	1	0.82%	1
7.	Large Intestines	9	7.38%	2	1.64%	1
8.	Mesentry	36	29.51%	3	2.46%	3
9.	Liver	83	68.03%	5	4.1%	8
10.	Spleen	53	43.44%	-	-	5
11.	Gall Bladder	2	1.64%	-	-	2
12.	Pancreas	10	8.2%	2	1.64%	1

13.	Adrenals	5	4.1%	-	-	5
14.	Vascular Injuries	5	4.1%	1	0.82%	6
15.	Kidneys	33	27.05%	3	2.46%	3
16.	Urinary Bladder	15	12.29%	-	-	1
17.	Urethral Injuries	5	4.1%	-	-	5
18.	Uterus	1	0.82%	-	-	1
19.	Ovaries	1	0.82%	-	-	1
20.	Lumbar Spinal Column	5	4.1%	2	1.64%	7
21.	Sacrum	2	1.64%	-	-	2
22.	Pelvic Bones	58	47.54%	-	-	5

Liver was involved in majority of the victims (72.13%), followed by spleen in 43.44%, then mesentery in 31.97% and kidneys in 29.51% cases. Pelvic bones involvement was observed in 47.54% of total cases.