SAS Journal of Surgery (SASJS) **ISSN 2454-5104**
Abbreviated Key Title: SAS J. Surg.

A Unit of Scholars Academic and Scientific Society, India

Evaluation of the Clinical Presentations of the Patients with Head Injury

Dr. Dilip K. Apturkar[1], Dr. Aakash Joshi[2*]
[1]HOD & Professor, Department of Surgery, Rural Medical College, Pravara Institute of Medical Sciences, Loni, Tal Rahata Dist. Ahmednagar, India
[2]Resident, Department of Surgery, Rural Medical College, Pravara Institute of Medical Sciences, Loni, Tal Rahata, Dist. Ahmednagar, India

Original Research Article

***Corresponding author**
Dr. Aakash Joshi

Article History
Received: 13.04.2018
Accepted: 25.04.2018
Published: 30.04.2018

DOI:
10.21276/sasjs.2018.4.4.3

Abstract: In a rapidly developing country like India, road transportation is massively increasing due to urbanization and industrialization. As a result, head injuries due to road traffic accidents (RTA) have become a daily occurrence taking an increased toll on human lives and limbs. Most of these patients are in their prime age (2nd and 3rd decade of life) and therefore have a direct social and economic effect besides the emotional burden of suffering a lifelong debilitating loss of function. It was prospective hospital based observational study. In the present study 100 cases of Head Injury were studied who were admitted under General Surgery with two years duration. Out of 100 Patients of present study 93 patients managed Conservative and 6 were death and 87 recovered and 07 patients where under gon Neurosurgical Intervention, 4 were dead and 3 recovred. In all Head Injury patients commonest presenting symptoms was unconsciousness found in 47% (47) cases followed by Vomiting 43% (43) cases and ENT bleed in 38% (38) cases. Other complaints were convulsion 8% (8) cases.
Keywords: head injuries, unconsciousness, ENT bleed.

INTRODUCTION

In a rapidly developing country like India, road transportation is massively increasing due to urbanization and industrialization. As a result, head injuries due to road traffic accidents (RTA) have become a daily occurrence taking an increased toll on human lives and limbs. Most of these patients are in their prime age (2nd and 3rd decade of life) and therefore have a direct social and economic effect besides the emotional burden of suffering a lifelong debilitating loss of function.

The human brain is most important organ, it is of incredible complexity in design and function, but vulnerable to injury [1]. Head trauma can have transient symptoms, or lead to chronic signs and symptoms. The apparent seriousness of head injury can be misleading. Minor trauma can result in serious problems, or patients who sustain serious injuries can survive. The medical management of acute head trauma can be quite complicated and expensive. As more medical and surgical therapies for head trauma are available, the role of CT scan has become more important [2].

The primary goal in treating patients with head injury due to any cause is to preserve life of the patient and remaining neurological function. Optimal management of these patients depends on early and correct diagnosis and therefore CT scan head has a vital role. The advent of CT has been a major breakthrough as it meets these vital requirements. CT also forms the important screening modality for victims of both blunt and traumatic injuries.

METHODOLOGY

The present study was carried out on patients of head injury, referred to Department of General Surgery at Rural Medical College & Hospital, Loni, Tal. Rahata, Dist. Ahmednagar.

100 Cases studied among the patients admitted with the head injury to Surgical Ward & ICU. It was prospective hospital based observational study. In the present study 100 cases of Head Injury were studied who were admitted under General Surgery with two years duration.

Sample Size: 100 Patients.

Patient Selection

Inclusion Criteria

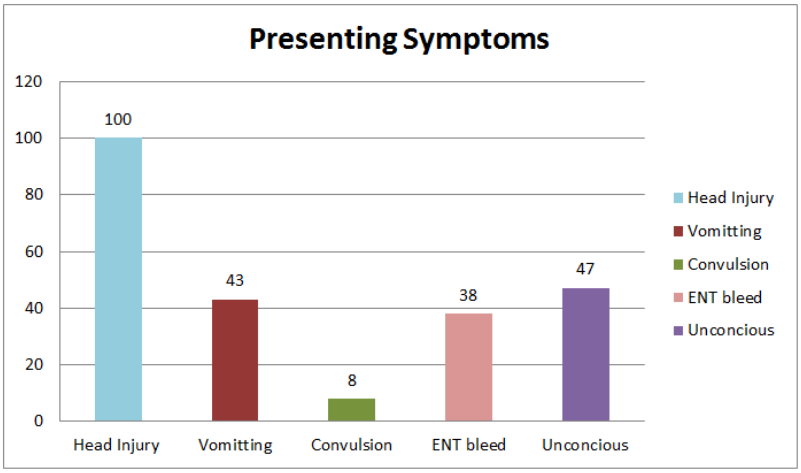
- Adults from the age of 18 years onwards.
- Patients with a history of road traffic accident, fall or assault were included in this study.

Exclusion Criteria

- Pediatric cases.
- Patients those could not be followed for reasons like : shifting of patient by patients relatives to other cities

Almost all patients had altered sensorium or neurological deficit or a combination of both. All these patients were clinically assessed and grouped according to the Glasgow Coma Scale before the procedure was conducted.

RESULTS



Graph-1: Presenting Symptoms

Table-1: Presenting Symptoms

History of	No of Patient
Head Injury	100
Vomitting	43
Convulsion	08
ENT bleed	38
Unconsciousness	47

In all Head Injury patients common presenting symptoms was unconsciousness found in 47% (47) cases followed by Vomiting 43% (43) cases and ENT bleed in 38% (38) cases. Other complaints were convulsion 8% (8) cases.

Table-2: Glasgow Coma Score

Glasgow Coma Score	Number of Cases	Death GOS1	Recovery GOS2,3,4,5
<8	22	10	12
9-12	20	0	20
13-15	58	0	58

Out of 22 Patients of Severe Head Injury (GCS<8) 10 patients expired and 12 recovered. In 20 patients of Moderate Head Injury (GCS 9-12) all patients recovered and in 58 patients of Mild Head Injury (GCS 13-15) all patients recovered. This signifies severe Head Injury (GCS <8) were associated with high mortality.

DISCUSSION

With the constant increase in high velocity accidents and violence over past decades, the matter of acute head trauma is one of prime importance. In his classic textbook dealing with head trauma, Brock states that - "The appealing number of accidents in modem life makes the subject of injury as important as that of any pandemic scourge"[3].

The elderly group generally tends to have injuries of a lower impact, such as those sustained in falls [4]. This may be due to frailties associated with advanced age, such as poor eyesight, impaired balance, postural hypotension and cerebrovascular accidents. As such, these patients seem to have less associated multiple injuries or accompanying cervical injuries.5

The rapid pess of technology can be beneficial in such patient management. [4]The newer technologies in operative also added more advantages [5]. It is as yet

unclear why the elderly have a greater propensity to develop a haematoma after an apparently trivial injury. Certainly, cerebral atrophy with a change in the viscoelastic properties of the brain, alterations in the mechanical properties of the bridging veins and stress placed on the venous structures secondary to cerebral atrophy may all contribute [6]. Other systemic factors, including higher mean blood pressure, increased vascular rigidity and alterations in haemostatic mechanisms, may result in the development of larger haematomas, as would the greater potential volume of the subdural space following brain atrophy. In all Head Injury patients commonest presenting symptoms was unconsciousness found in 47% (47) cases followed by Vomiting 43% (43) cases and ENT bleed in 38% (38) cases. Other complaints were convulsion 8% (8) cases [7].

Out of 100 Patients of present study 93 patients managed Conservative and 6 were death and 87 recovered and 07 patients where under gon Neurosurgical Intervention, 4 were dead and 3 recovred.

CONCLUSION

In all Head Injury patients commonest presenting symptoms was unconsciousness found in 47% (47) cases followed by Vomiting 43% (43) cases and ENT bleed in 38% (38) cases. Other complaints were convulsion 8% (8) cases.

REFERENCES

1. Clifton GL, Grossman RG, Makela ME, Miner ME, Handel S, Sadhu V. Neurological course and correlated computerized tomography findings after severe closed head injury, J Euro Surg. 1980 May; 52(5):611-24.
2. BK Gan, JHG Lim. Outcome of Moderate and Severe Traumatic Brain Injury amongst the Elderly in Singapore. Ann Acad Med Singapore 2004;33(1):63-7.
3. Coles JP. Imaging after brain injury. British journal of anaesthesia. 2007 Jul 1; 99(1):49-60.
4. Tayade MC, Karandikar PM , Role of Data Mining Techniques in Healthcare sector in India, Sch. J. App. Med. Sci., 2013; 1(3): June ; 158-160
5. Karandikar PM ,Tayade MC, Application of Robotics technology in clinical practice in India, Asian Journal of Medical Sciences, September 2013, Vol.5(1)29-33
6. Naseri M, Toumasian A, MOGHADAS A. Correlation of CT scan findings with the level of consciousness in acute head trauma. 2005.
7. Wen-Han Chang, Shin-Han Tsai, Yu-Jang Su, Chien-Hsuan Huang, Kou-Song Chang, Cheng-Ho Tsai. Trauma Mortality Factors In The Elderly Population. International Journal of Gerontology. March 2008; 2 (1): 11-17.