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RESEARCH ARTICLE

OUTCOME OF ACUTE TRAUMATIC EPIDURAL HEMATOMAS BASED ON THE GLASGOW COMA SCALE IN A RURAL SETTING

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Key words:-
Epidural Hematoma, Glascow Coma Scale, GOS

Abstract

Aim: To establish the correlation between initial GCS score and its impact on further management and outcome.
Materials And Methods: A prospective study was done at department of surgery at Jmch from April 2021 to march 2022 on 30 patients after fulfilling inclusion and exclusion criteria. Data was collected using patient data sheets which were presented in tables and graph.
Results: Out of 30 cases,23 males and 7 females were observed out of which maximum incidence observed at the age of 21 to 30 years with RTA being most common mode of injury. 17 patients were observed with gcs>13 of which 13 patients underwent conservative management. At the end of study all patients discharged with good outcome.
Conclusions: Study shows incidence of EDH in M;F about 2.74: 1.This study examined the factor for surgery from the clinical rather than radiologic perspective of initial EDH, which is not indicated for GCS score can be a factor for deciding the further management of EDH.

Introduction:-

Extradural hematoma (EDH) accounts for 2 to 11% of traumatic brain injuries (TBIs) . It is formed due to collection of blood between Dural membrane and inner surface of skull.

Aim:-

To establish the correlation between initial GCS score and its impact on further management and outcome.

Objective:-

1) To study the pattern of distribution.
2) To study various modes of management and its outcome.

Methodology:-

This study was conducted in Jorhat medical College and Hospital, Jorhat, Assam using Hospital based Single Centre prospective study design Study was carried out for One year from 1 April 2021 to 30 march2022. All the patients attending at Department of General Surgery, Jorhat Medical College and Hospital during the study period were included . Henceforth the Sample size was 30.

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Inclusion Criteria:
1) Patients admitted to Jorhat medical college & hospital with epidural hematoma following head injury during the study period.
2) Non operative management in the patients presenting with initial gcs of 13 or more
3) To consider patient for operative management whose gcs drops at any point of study.

Exclusion Criteria:
1) Patient with other head injury like Subdural haematoma, Subarachnoid hematoma etc.
2). Patient who is having other associated injuries like abdominal injury and chest injury etc
3) Extreme of ages i.e. <10 and >60 years.
4) Pregnant and post-partum female.
5) Patient who had a history of coagulopathy
6) Patient being intoxicated at the time of examination
7) Patient who refuses to give their consent at any point of study or doesn't want to take part in study.

Statistical Analysis:
The data is analyzed in the form of tables and figures by using MICROSOFT EXCEL .

Results And Observations:-

Fig 1:- Incidence Of Edh In Relation To Sex.

Sex	**No. of pt.**	**%**
Male	23	77
Female	7	23

Fig 2:- Incidence Of Edh With Respect To Age.

Age in years	**No. of patients**
11-20	4
21-30	11
31-40	9
41-50	4
51-60	2

Fig 3:- Incidence Of Different Mode Of Injury.

	NUMBER OF PATIENTS	PERCENTAGE
RTA	18	60
Physical assault	7	24
Fall	5	16

Fig 4:- Incidence Of Gcs Score On Admisssion.

GCS ON ADMISSION	NUMBER OF PATIENTS	PERCENTAGE
13-15	17	57
9-12	8	37
<8	5	16

Fig 5:- Initial GCS score and management.

INITIAL GCS SCORE	NUMBER OF PATIENT	OPERATIVE MANAGEMENT	NON-OPERATIVE
13-15	17	4	13
9-12	8	8	0
<8	5	5	0

Fig 6:- Management and outcome.

	TOTAL	GOOD-OUTCOME (gos-4-5)	POOR OUTCOME (gos – 2-3)	DEATH (gos- 1)

operative	17	12	5	0
Non operative	13	13	0	0

Discussion:-

In a study of 30 patients 23 male and 7 female patient were observed with peak incidence at the age of 21-30 years with RTA being the most common mode of injury. Initial GCS13-15 has been observed in 17 patients i.e., 57% of total studied population of which 13 patients underwent non operative management, all with a Glasgow outcome of 4-5 at the end of study. Conventionally, extradural haematoma managed operatively but in our study 79% of patients being managed non operatively.

Conclusion:-

In selected cases of extradural haematoma whose initial gcs score is >13 patients can be managed non operatively. However further study needs to be done with larger sample size.

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