



Original Article

Subdural Haematomas: Study of 200 cases

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Abstract

Total 200 patients with subdural haemorrhages were managed in 11 years in Department of Neurosurgery, Rajshahi Medical College. Out of these, 80 patients had acute SDH and 120 patients had chronic SDH. All of them presented with headache and variable degree of lack of alertness. About 120 patients presented with hemi-paresis, 75 patients presented with urinary retention. Male and female patients were 180 and 20 with a ratio 9:1. All the patients were after 6th decades of life in CSDH. Bilateral acute and chronic SDH was seen in 40 (20%) patients. All of them were evacuated by two burr holes and irrigations with normal saline. One patient developed re-accumulation and drained by ventricular cannula. GCS varied from 7-13. ASDH was treated by wide craniotomy. Mortality rate was 25 (12.5%).

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Introduction

Post traumatic intracranial haematomas are most frequently classified according to their locations^{1, 2} into epidural, subdural, and cerebral haematomas. Subdural haematomas may present as acute subdural (ASDH), sub acute subdural haematoma (SSDH) and chronic subdural haematomas (CSDH)³. ASDH present in 72 hours of injury³, SSDH occurs in 72 to 3 weeks and CSDH occur more than 3 weeks of duration⁴. Most often ASDH are caused by rupture of bridging veins that traverse the subdural space⁵. CSDH caused by a minor head trauma or fall, often not remembered by the patients or relatives. ASDH often develops due to rupture of cortical arteries⁶.

Patients and Methods

This descriptive study was carried out from July

1994 to June 2005 in Rajshahi Medical College Hospital. In our study of 200 patients are analyzed. Male to female ratio was 9:1. Age range of the patients in ASDH was 30 to 70 years but in CSDH was after 6th decades of life with range of 60-80 years. Bilateral CSDH was noted in 20% patients.

n=200	Time of present	Location
ASDH - 80(40%)	< 72 hours	Unilateral – 80 (100%)
CSDH-120 (60%)	> 3 weeks	Both side of brain – 30 (25%) Unilateral – 90 (75%)

Clinical presentation

ASDH (n=80)	CSDH (n=120)
GCS <12= 50 (62.5%)	GCS <12= 100 (83.3%)
GCS <7= 30 (37.5%)	GCS <7= 20 (16.67%)

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Lucid interval=05 (6.25%) Hemi paresis= 90 (75%)

Age=30-70 years >6th decades of life

Investigation

All (100%) patients under went routine investigations e.g. Blood for TC, DC, Hb%, Blood sugar, Urea, ECG, X-ray chest and S. electrolytes. All patients had CT scan of brain, showed SDH either unilateral 170 (85%) or bilateral 30(15%) (Fig-I & II). In this study, after resuscitation of all (100%) patients under went surgery by two burr hole in each side for evacuation and with normal saline wash with drain in situ for variable period and 40 (20%) patients needed craniotomy. 02 (0.02%) patients needed repeated evacuation for re-accumulation of haematomas. Twenty one (10.5%) was hypertensive, diabetic and aged (> 80 yrs).

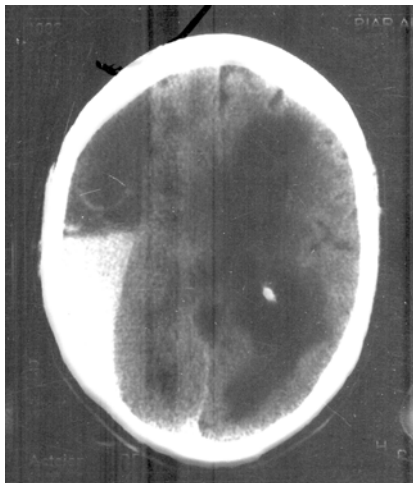


Fig-I SDH (Unilateral)

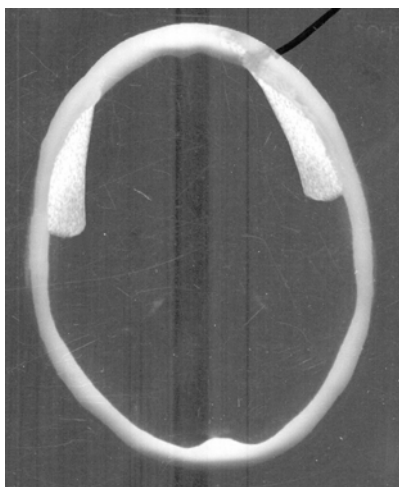


Fig-II SDH (Bilateral)

Results

ASDH (n=80)	CSDH (n=120)
Residual deficits absent	Residual deficits present in 30 (25%)
Mortality 10 (12.5%)	Mortality 15 (12.5%)

Discussion

Acute SDH and chronic SDH are common findings in patients who have sustained severe to mild closed head injuries¹. Outcomes in these patients have improved as a result of more rapid diagnosis and Neuro-surgical treatment². In our result prognosis is good as well as excellent. About 30% of patients with severe head injury have ASDH³. In our study 80 (40%) of patients have ASDH and 120 (60%) CSDH. Improved outcome were seen in young patients³. In CT scan era overall mortality rates ranges from 40% to 90% in ASDH but in CSDH about 5% to 20%. In our study it was 15 (12.5%) in CSDH and some percentage in ASDH. Seelig et al showed that significant age related differences were observed in the type of injuries sustained, CT scan findings and neurological outcomes⁴. The most common mechanism of injuries are older patients was in simple fall 55%^{5,6}. In our study history of fall in the bathroom 70%. Falls were followed by lucid interval. An important feature to consider in the possibility that aging brain have impaired regenerative capacity⁶. ASDH and CSDH haematomas patients have poor outcomes in the older age groups may reflect impaired recuperative capacity of aging brain, a predisposition to develop a more lethal type of injury or excessive delay to haematoma evacuation⁶.

Conclusion

ASDH occurs following a trivial head injury, rupture of cortical arteries, considered as possible

cause. For young patients, cerebral vascular angiography should be performed before operation. Wide craniotomy significantly covering the region of haemorrhage should be performed to obtain hemostasis of bleeding points. On the other hand CSDH can be effectively deal with simple evacuation through burr holes. Prognosis and outcomes of all patients in our study was good.

Acknowledgement

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Reference

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