128 Cases of EDH - One Year Study

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EDH incidence in society is common and can be life saving if timely intervened. Its incidence is more in male and the most common site is temporoparietal region (85%). A collection of 15 ml of blood in the substantial space results in severe functional disturbance. We have managed 128 cases during one year. 10 cases were managed conservatively. We recommend urgent surgical intervention as size of EDH is increasing and it can be fatal for life if delayed. Key words: Extradural Haematoma.

It is most satisfying case for a neurosurgeon and constitutes a major source of preventable mortality in head injury approximately 100% rewarding depending upon timely surgical intervention. It is known to have vague signs and symptoms notorious course that varies from recovery to sudden death.

Materials and methods

The duration of study is March 2004 to March 2005. Total number of patients is 128 cases extradural haematoma. The age range is few months to 71 years. The males have clear predominance over female ratio (7:1). The commonest causes of EDH is road traffic accident, assaults, falls and sports injury.

Results

Out of 128 patients, 118 (92%) patients were managed surgically, 104 (88%) were managed by craniotomy and 14 (12%) were managed by craniotomy/bur hole. The results were excellent in 82.1%. The result was fair to poor (with neurological deficit) in 15.2% and mortality was 2.7% (3 patients). Out of these 128 EDH patients, 85 were RTA, 30 fall, 9 assault and 4 sports.

Discussion

118 cases were managed surgically (4 were post fossa EDH), 10 cases were managed conservatively.

Table 1 Emergency operations from Jan 2004 to Mar 2005

Age group	Male	Female
Upto 13yrs	12	02
13-20y	30	05
21-30y	25	04
31-40y	19	02
41-50y	12	02
51-60y	10	02
61-70y	02	01
71y +		
Total	110	18

In children under 3 years and in the older age group, the dura is adherent to the inner table and hence the (EDH) is less frequent. In more than 50% of EDHs, the source of bleeding is a ruptured middle meningeal artery. In 33% it

is a ruptured middle meningeal vein. The rest is from venous sinuses and diploic veins.

In 85%, the involved site is temporo-parietal region, and in about 13% the site is frontal. In 2% cases it is bilateral and post fossa involvement. Posterior fossa edhs are uncommon, but the clinical deterioration is rapid. A fracture at the region of transverse sinus or a diastasis of the lamboid or occipito-mastoid suture should alert the surgeon. A collection of 15ml of blood in the subtentorial space results in severe functional disturbance. Obstructive hydrocephalus is an ever present possibility. The volume is not always directly proportional to the severity of the clinical symptoms. 25 ml of heamatoma is considered significant. The clinical picture depends on location, rapidity of hematoma formation, associated intradural and other injuries, and internal decompression through fractures (blood & CSF leakage). The classical triad of head injury with lucid interval, ipsilateral mydriasis and contralateral paresis occurs only in 18% of cases and mainly in hematoma of the parieto-temporal region. Often, the clinical picture is a combination of the above. There are no definite symptoms of epidural hematomas. The clinical course may be the same in acute SDHs, ICHs, and temporal and frontal contusions. In acute EDHs, the frequency of the clinical presentations is as follows:

Hyperacute course(up to 10 hrs)	10%
Acute course(up to 24 hrs)	38%
Short LOC followed by lucid interval (classical type)	18%
Irritability, headaches, nauseas	84%
GCS<7 from the onset with progressive	31%
deterioration	
Ipsilateral anisocoria	50%
Contralateral anisocoria	04%
Contralateral hemiparesis	62%
Ipsilateral hemiparesis (kernohan's phenomenon)	03%

Conclusion

Neurotrauma is one of the most important chapter of Neurosurgery. Its importance is even more in developing countries like Pakistan. Preventive measures must be taken to reduce the possible causes of neurotrauma. Special care in the transport of patients after sustaining head or spinal injuries. Early and prompt action to reduce secondary damage and media campaign to make the public awareness regarding severity & importance of neurotrauma. How this Neurotrauma can be minimized.

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