EXTRADURAL CEREBELLAR HEMATOMA
REPORT OF THREE CASES WITH REVIEW OF THE LITERATURE
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Several reports of successful operations in cases of traumatic extradural hematoma in the posterior fossa of the skull have recently been published in the literature. Yet this condition is generally thought to be rare and its symptomatology is as yet ill defined. It is either not mentioned at all or only very briefly in well known textbooks on head injuries. Since the attention of clinicians has been drawn to this kind of injury by various authors the number of cases observed has increased and the chances of the patient for survival and recovery have improved.

During the last year and a half 2 such cases were seen in our department and another was observed in the Surgical Department of the Rothschild Hospital in Haifa, to which we owe the details. The fact that 3 cases were seen in a relatively short period of time in this country makes us feel that extradural cerebellar hemorrhage must occur more frequently than would appear from the number of published cases. On the basis of our own experience and relevant communications in the literature we wish to outline the symptoms and signs of this disease.

CASE REPORTS

Case 1. A. C., a male aged 18 years, was admitted to another hospital because of brain concussion after he had been kicked by a horse behind the left ear. He had been unconscious for a short time and was still drowsy on admission to that hospital. There was a lacerated wound, 6 cm. long, in the left temporo-occipital region. The underlying bone was slightly depressed. Neurological examination was apparently negative. B.P. was 120 mm. of mercury systolic and 60 mm. diastolic; pulse rate was 72. The wound was excised and sutured and the patient was well the day afterwards. Two days after the injury he again became drowsy and more and more restless. His pulse rate came down to 54 per min. On the third day rigidity of the neck and a positive Kernig sign were noted. The patient vomited twice and his pulse rate fell to 50. Temperature was normal. He became stuporous, and as intracranial hemorrhage was suspected he was transferred to our department.

Examination. The patient was very drowsy; he hardly responded to orders. He had marked rigidity of the neck, increased tonus of the extremities on the left with hyperactive reflexes on the same side, horizontal nystagmus on looking to the left and slight ataxia of the right arm. Roentgenograms of the skull revealed a stellate fracture of the left occipital bone (Fig. 1).

On account of the trauma, the cerebral state of the patient, bradycardia, meningeal and cerebellar signs, a preoperative diagnosis of extradural hematoma in the posterior fossa was made.
Operation. The scalp wound was enlarged posteriorly and a 4×4 cm. depressed fracture of the left occipital bone was exposed. A burr hole was made in the depressed bone, under which old black blood clots were encountered. The whole depressed bone fragment was then removed and about 60 cc. of clotted blood were evacuated. The hematoma was localized in the left posterior fossa mostly beneath and partly above the transverse sinus. After all the clotted blood had been washed out two sources of bleeding were found, one from a small tear in the transverse sinus and the other from the sigmoid sinus. The bleeding was stopped by electrocoagulation and application of gelfoam soaked with thrombin. A small Penrose drain was left in the epidural space for 48 hours and the wound was closed.

Course. The patient made an uneventful recovery and left the hospital 11 days after operation with no abnormal neurological signs whatsoever. He was seen 5 weeks later entirely healthy and back at his work.

Case 2. S. M., a 27-year-old male, was admitted to another hospital 3 hours after the car in which he was riding had struck a mine. He was found to be very drowsy. His pulse rate was 80 per min.; B.P. was 115 mm. of mercury systolic and 70 mm. diastolic; respiration was normal. There were several lacerations of the scalp, especially in the left occipital region. In addition the patient had closed fractures of the ulna, tibia and 5th metacarpal bone and an open fracture of the 3rd metatarsal bone, all on the left side. No neurological abnormalities could be elicited. X-ray of the skull revealed a starlike fracture of the left occipital bone. The skin lacerations were debrided and sutured and the broken bones were reduced and fixed in plaster of Paris.

The following day the patient grew restless, but no abnormal neurological signs could be detected for the next 6 days, although he never fully recovered consciousness. On the 7th day after the injury his somnolence increased and his temperature rose to 38.5°C. Anisocoria was then noticed and the extremities on the right side were found to be spastic. Since intracranial complication was suspected the patient was transferred to our department.

Examination. He was deeply comatose and responded to very painful stimulation only. The left pupil was larger than the right; both reacted promptly to light. There was no papilledema. He had slight rigidity of the neck, a right spastic hemiparesis and a positive Babinski sign on the right side. Temperature was 39.2°C. and B.P. had risen to 130/70 mm. of mercury.

Operation. Subacute subdural hemorrhage was suspected and burr holes were made in both temporal regions and the left parieto-occipital area. No bleeding was found in either the epidural or subdural space. Although the possibility of a posterior fossa hematoma was considered, no infratentorial exploration was carried out, since anisocoria seemed to rule out a cerebellar lesion.