INTERHEMISPHERIC SUBDURAL HEMATOMA

CASE REPORT

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Subdural hematoma is a well known entity and many large series of cases of this condition have appeared in the literature. The usual description of this lesion is a diffuse or localized collection of blood, either liquid or clotted, over the convexity of the cerebral hemispheres. Little mention is ever made of blood in the subdural space between the cerebral hemispheres. It must be presumed, therefore, that this is either a rare finding or that it is often overlooked.

CASE REPORT

An elderly white male was found in a state of unconsciousness by the police. He apparently had been drinking.

Examination revealed a laceration of the left parietal region, massive edema of the scalp and abrasions of the nose and forehead. He was stuporous and his only response to painful stimuli was movement of the right upper extremity. Both lower extremities were markedly spastic; the left upper extremity was moderately spastic. Deep reflexes were hyperactive, more marked on the left. There was left facial paresis and Babinski’s toe sign was positive on the left. Roentgenograms of the skull disclosed a simple linear fracture in the right parasagittal area extending from the frontal region almost to the foramen magnum.

Right carotid angiography revealed no evidence of a subdural or epidural collection. However, there was displacement of the anterior cerebral and pericallosal arteries to the right. Left carotid angiography was then performed. There was a small subdural collection over the convexity of the cerebral hemisphere. In addition both anterior cerebral and pericallosal arteries were opacified on this side. These vessels were separated from each other in their posterior portions leaving a relatively avascular zone in the region of the falx cerebri (Fig. 1).

Operation. Two left parasagittal burr holes were made. The posterior hole was at the usual level while the anterior hole was placed just posterior to the coronal suture. About 12 cc. of clotted blood were evacuated from the subdural space between the hemispheres through the anterior burr hole. While attempting to remove a similar collection of clotted blood through the posterior burr hole uncontrollable bleeding was encountered. This bleeding came from the superior longitudinal sinus. The roof of this structure had been caught between the edges of the skull fracture and lacerated. It was necessary to rongeur the bone over the superior longitudinal sinus and control the bleeding with Gel-foam.

Postoperative Course. The patient became alert and the abnormal reflexes gradually disappeared. However on the 27th postoperative day right parotitis developed. He continued to have a low-grade fever in spite of antibiotics and expired on the 41st day after operation.

Autopsy revealed the brain to be completely normal. The cause of death was bilateral bronchopneumonia.

DISCUSSION

Jacobsen was the first to report a subdural hematoma situated between the hemispheres diagnosed by angiography. He described and illustrated displacement of the central and posterior portions of the pericallosal artery away from the midline, creating an avascular area along the falx cerebri on one side. On the opposite side there was minimal distortion of the pericallosal artery. Campbell and Campbell have reported a case in which there was separation of the pericallosal and callosomarginal arteries on the affected side. In their case there was also an avascular area along the falx cerebri. In both of the above cases the subdural hematoma was removed and the patient survived.

SUMMARY

A case of interhemispheric subdural hematoma is presented. The literature has been reviewed. The importance of an avascular zone along the side of the falx cerebri on angiography is emphasized.

REFERENCES

Fig. 1. Left carotid angiogram. The anterior and posterior portions of the simple linear fracture can be seen. There is a small subdural collection over the convexity of the cerebral hemisphere. Both anterior cerebral and pericallosal arteries are opacified and are separated in their posterior portions. There is an avascular area adjacent to the falx cerebri.

