CONCLUSION

A case of granuloma of the brain due to Schistosomiasis Japonicum is presented. It is to be pointed out that while this represents a rare situation, further cases will likely appear in the future presenting themselves as intracranial lesions.

REFERENCES

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ARTERIO-VENOUS ANGIOMA (HAMARTOMA) OF THE BRAIN WITH INTRACEREBRAL HEMORRHAGE

REPORT OF A CASE WITH OPERATIVE REMOVAL OF THE HEMATOMA AND RECOVERY

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(Received for publication August 26, 1946)

The arterio-venous angioma of the brain is a hamartomatous lesion composed of a tangled mass of interlacing vessels which resemble both arteries and veins. These lesions have been described under a variety of names (Table 1) but in general have a rather characteristic morphology. When seen at the operating table they appear to involve little more than the surface of the brain, but at autopsy are seen as a wedge-shaped mass which extends to the ventricles. On the surface most of the vessels appear to lie in close proximity but deeper in the

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cerebral substance they are frequently separated by gliotic brain tissue. Inasmuch as some portion of the angioma is in contact with the ventricle, rupture into the ventricular system during a convulsion is a common cause of death in patients with these lesions. In the following case, however, the hemorrhage resulted in the formation of an intracerebral hematoma which was removed surgically.

The patient was a 38-year-old, obese male admitted to the North Unit of the Youngstown Hospital on Mar. 7, 1946. For about 9 years he had experienced intermittent headache associated with nausea and vomiting. There had been occasional twitching of the left side of the face and of the left upper extremity for about 1 year but these had not been constant nor had they been severe enough to alarm the patient.

The day prior to admission the patient had a severe headache with nausea and vomiting, and this was followed by what was described as a “fainting spell” with subsequent development of a spastic left hemiplegia. After this episode he became quite drowsy but continued to complain of severe right hemicranial headache. There had been no symptoms referable to the visual system and no evidence of a speech disorder. There was no history of tinnitus or symptoms referable to the auditory system. The past history, aside from that given above, was non-contributory. Blood Kahn and Kline tests were negative; no abnormalities were found in the usual laboratory studies. The patient was right-handed.

**Examination.** He appeared to be acutely ill and quite lethargic but was nevertheless able to answer questions coherently. Blood pressure was 126/82; pulse 68; respirations 24; and temperature 99.2. There was a left spastic hemiplegia with practically total paralysis of the upper and lower extremities. Facial paralysis of central origin was present on the left and was severe enough to cause marked slurring of speech. However, there was no evidence of an aphasic disorder. The deep reflexes on the left were hyperactive and the Babinski sign was strongly positive on this side. The abdominal reflexes were absent on the left but normal on the right and there was sustained ankle clonus on the paralyzed side.

No sensory defect could be elicited on examination. Confrontation fields disclosed a left homonymous hemianopsia with sparing of the macular area as far as could be determined. The margins of the optic discs were blurred but there was no measurable elevation. The retinal vessels appeared hyperemic but otherwise normal. The left pupil was fixed and measured 9 mm. as compared to 7 mm. on the right. All other cranial nerves were normal. There was no bruit on auscultation of the skull. Roentgenogram of the skull disclosed no diagnostic abnormality.

Despite the absence of significant changes in the x-rays of the skull, the long history with few signs indicative of any marked increase in intracranial pressure over a 2-year period suggested the presence of a slowly growing tumor. However, the clinical evidence of extensive involvement, sufficient to include the leg, arm, and face area, as well as enough of the temporal lobe to involve the optic tracts, was rather difficult to visualize unless the lesion were situated deeply enough to include the internal capsule. Accordingly, ventriculography was carried out. On the left side the ventricle was reached at about 5 cm. from the surface and the