ASTROCYTOMA GRADE III ASSOCIATED WITH PROFUSE SUBARACHNOID BLEEDING AS ITS FIRST MANIFESTATION

CASE REPORT

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(Received for publication July 17, 1950)

Many reports in the literature suggest that cerebral neoplasms may cause subarachnoid bleeding. In the majority of cases reported the amount of subarachnoid blood has been minimal. Recently, Echols and Rehfelt collected 4 cases of profuse subarachnoid hemorrhage due to malignant brain tumor in the American literature and added 1 case of their own. The case we wish to report is unique in that the history was brief and cerebral neoplasm was not suspected.

CASE PRESENTATION

A 27-year-old, right-handed white male was first seen in a nearby Naval Hospital on Mar. 7, 1950. He had apparently been in good health until the morning of Mar. 6, 1950. On that day he was lifting a pig into a truck. The animal jumped unexpectedly, causing the patient to extend his head and neck quickly and forcibly. This precipitated a sharp frontal headache, which rapidly spread to involve the entire head, and stiffness of the neck. The headache was so severe that a private physician was consulted. Morphine was prescribed for the headache, but no relief was obtained.

When seen in the Naval Hospital in the evening of Mar. 7, 1950, the patient gave a history of headache of 36 hours' duration.

Examination. He was stuporous but could be aroused. B.P. 126/62, pulse 56, and respirations 16. Temperature 97.8°F. The pupils were pinpoint. The reflexes were hyperactive bilaterally, but no pathological reflexes were obtained. The remainder of the examination was essentially negative. A lumbar puncture at time of admission yielded grossly bloody CSF with an initial pressure of 270 mm. Microscopic examination revealed innumerable RBC. The centrifuged CSF showed the supernatant fluid to be xanthochromic.

On Mar. 8, 1950, lumbar puncture was repeated. The initial pressure was 830 mm. of CSF and again the appearance was bloody. On this day the Oppenheim sign was positive on the left.

The patient was transferred to Kennedy Veterans Administration Hospital on Mar. 14, 1950. The history and findings were as described above, except that the Oppenheim sign could not be elicited.

On Mar. 16, 1950, another lumbar puncture was performed. The initial pressure was 190 mm. of CSF and the fluid was xanthochromic. One week later, a right carotid angiogram was done by the closed method. This was interpreted as being within normal limits. No evidence of aneurysm was noted. On Mar. 29, 1950, a left carotid angiogram was done by the closed method. A vascular anomaly was noted in the left parietal area (Fig. 1). In order to rule out tumor in the area, pneumoencephalography was performed on Apr. 4, 1950. This revealed a filling defect in the anterior horn of the right lateral ventricle (Fig. 2).

* Reviewed in the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are a result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

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Fig. 1. Angiogram demonstrating vascular plexus in left posterior parietal area.

Fig. 2. Showing defect of anterior horn on the right.

Operation. After posterior parietal burr holes and a ventriculogram had better delineated the tumor, a right frontal craniotomy was performed on Apr. 12, 1950. The tumor was located in the inferior portion of the right frontal lobe and presumably invaded the corpus callosum. The tumor was partially removed and the tip of the right frontal lobe amputated. Microscopical diagnosis: Astrocytoma, grade III.