CEREBELLAR MEDULLOBLASTOMA WITH VERIFICATION NINETEEN YEARS AFTER THE ONSET OF SYMPTOMS

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MEDULLOBLASTOMAS are usually considered solid, midline cerebellar tumors of childhood with rapid progression but with excellent, if usually temporary, response to roentgen therapy. Because these characteristics have become so firmly established, it may be of interest to record an instance of cerebellar medulloblastoma which departs clinically in almost all respects from the usual behavior of this tumor but has the typical histological appearance.

REPORT OF CASE

A single, American school girl of 15 was admitted to the Peter Bent Brigham Hospital September 19, 1944. The family history and past history were irrelevant. She had been quite well until 2½ months before entry, when she began to have severe frontal headaches. During the month preceding hospitalization the headaches had become more severe and had been associated with vomiting. Some dizziness accompanied the most severe headaches and in the month before admission she had difficulty in reading fine print. Physical examination at that time showed marked suboccipital tenderness and a definite cracked-pot sound. There was choking of both optic discs (6 diopters), marked reduction of visual acuity, bilateral sixth nerve palsy and incoordination of movement in all extremities.

Operation I. A diagnosis of central cerebellar tumor was made and a suboccipital exploration was carried out by Dr. Percival Bailey. A portion of his operative note follows:

"On opening the dura the surfaces of the hemisphere looked rather vascular and showed no evidence of tumor. There was a rather marked pressure cone. Puncture of the left hemisphere met with slight resistance at a depth of about 5 cm. Puncture of the right hemisphere at a depth of 5 cm. came down upon yellowish fluid mingled with dark blood. About 15 cc. of fluid were removed. Since the cystic tumor was obviously too deep to be removed, the wound was closed carefully in layers as usual. The patient was in good condition at the end of operation."

Course. At the time of discharge 6 days after admission the patient had recovered remarkably. She was able to walk without assistance and the papilledema had almost entirely subsided.

Interval Note. Two years later (1946) a report by letter stated that she was in perfect health and was receiving roentgen therapy. Several treatments were given, the last one at the end of March, 1946. In March, 1947, a single additional treatment was administered. Unfortunately, it has been impossible to determine what dosage was used in these treatments.

Second Admission. She reentered the hospital May 16, 1947, for recurrent headache of 4½ months’ duration. During the 18 days preceding admission she had noticed slight unsteadiness of the right hand. Physical examination showed fulness of the suboccipital decompression, slight tenderness in that region, unequal, dilated pupils, hazy optic discs, a diminished right knee jerk and absent left knee jerk. A diagnosis of recurrent right cerebellar cyst was made.

Operation II. Reexploration was carried out by Dr. Harvey Cushing. This was done at the time when there was great interest in the endothermy apparatus, which had only recently been introduced into neurosurgery by Doctor Cushing. In fact, it was on this occasion that
the instrument now in general use was first employed. Doctor Cushing's operative note follows:

"Although the child complained considerably during the earlier stages of this exploration it was possible to get the cerebellum again well reexposed and it was only when she had an attack of vomiting from manipulations in the region of the fourth ventricle that ether was temporarily given.

"There had been a good deal of new bone formation in the defect, which made the reflection of the flap somewhat difficult. The cutting current was used with the new apparatus which had just arrived. I finally got down into the posterior cistern in the region of the foramen and found the upper part of the cord and the calamus quite normal in appearance. An abundance of fluid was coming from the ventricle and I did not feel therefore that there could possibly be a cerebellar tumor, which I had anticipated finding. Nevertheless, a median incision was made with the electro-current down fairly well into the uvula, which seemed to me a little prominent. However, I was rather half-hearted about this I fear. A puncture was made into each hemisphere without meeting resistance or getting fluid.

"There was no fulness of either cerebellar hemisphere and I was under the impression that in all probabilities no tumor is present, though, of course, I may be mistaken in this.

"I was held by bleeding in the right lateral angle of the exploration where a number of clips were found and where there must have been a good deal of bleeding at the previous operation.

"The flaps were then replaced and closed in layers, the last stages by Doctor Cairns.