METASTASES OF CARCINOMA TO MENINGIOMA

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Metastasis of one tumor to another is very rare. It is the purpose of this communication to present 2 instances of metastasis of carcinoma to meningioma. Three such cases have been found in the literature.1-3

In the previously reported cases there were 2 primary breast carcinomas and 1 primary bronchogenic carcinoma. In 1 of our cases, the primary was from bronchus, while in our second case, the histological appearance of the carcinoma pointed to renal cell origin, although neither abdominal operation nor autopsy was done and the renal tumor was never satisfactorily demonstrated by other means.

CASE REPORTS

Case 1. E.J., a 51-year-old white man, was first admitted to Boston City Hospital on Nov. 20, 1939 with a 4-year history of focal seizures involving the left hand and left face and followed by 5-20 minutes of unconsciousness. For the 3 months prior to admission he had noted left-sided weakness.

For 2½ years he had had episodes of sharp pain in his left shoulder and low back.

Examination. A pea-sized left supraclavicular node was found. Power of concentration was poor. There was blurring of the nasal margin of the left disc and slight papilledema on the right. He had a left central facial weakness and left spastic hemiparesis with flexor plantar reflexes. There was reduction of sensation on the left side.

On lumbar puncture the initial pressure was 200; final pressure was 180. There were no cells; total protein was 174 mg. for 100 cc.; colloidal gold and Davies-Hinton reactions were negative. Roentgenograms of the chest were normal. Roentgenograms of the skull were interpreted as showing increased diploic vascularity in the right temporoparietal region and slight thinning of the posterior clinoids. On ventriculography the right lateral ventricle was displaced downward and to the left with its superior border flattened in its middle and posterior portions.

Operation. On Dec. 5, 1939, a right parietal bone flap was turned and a very nodular tumor with soft cystic portions was seen. It was attached to the undersurface of the dura mater approximately over the mid-point of the Rolandic fissure. It was almost completely removed.

Pathological Report. The gross surgical specimen was described as consisting of: (1) A chestnut-shaped piece of tissue measuring $5 \times 5 \times 4$ cm., one face in contact with the dura mater. From the part of tumor near the dura mater there projected several papillae which were grossly distinct from the rest of the tumor. The tissue was firm on cut section and varied in color from gray-white to yellow. (2) A small piece of tissue, $1.5 \times 1.0 \times 0.8$ cm., similar to the main mass. One face was encapsulated; elsewhere it was bosselated.

Histologic Examination. The microscopic appearance was that of two tissues interdigitating. The first (Fig. 1) was made up of streaming sheets of cells with some tendency to whorl formation and a relatively dense, hyalinized, collagenous stroma containing many blood vessels. The cells in this tissue had well-defined nuclei and poorly defined eosinophilic cytoplasmic envelopes which blended imperceptibly with the surrounding stroma. The nuclei varied in size from about 10-30 μ and in shape from globular to elliptical. They had a well-defined nuclear membrane and a moderate amount of chromatin material arranged in the
**Fig. 1.** *Case 1.* Meningiomatous tissue (×200).

**Fig. 2.** *Case 1.* Meningiomatous tissue interdigitating with clear vacuolated tumor cells (×200).