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Breast carcinoma metastatic to the nasopharynx

by

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Abstract

A case report of a patient with adenocarcinoma of the breast with matastasis to the nasopharynx is described. The patient presented initially with pulmonary metastasis followed later by metastasis to the left jugulo-digastric lymph nodes. A prominent but asymptomatic nasopharyngeal mass was concomitantly discovered on head and neck examination. Three months later, symptoms of panhypopituitarism developed. Invasion of the base of the skull and pituitary were documented. Patients with adenocarcinoma of the breast and high cervical node metastasis should have a thorough otolaryngologic and head and neck evaluation.

Metastatic carcinoma to the nasopharynx is an extremely rare occurrence. Only two cases of bronchogenic carcinoma of the lung and two cases of hypernephroma metastatic to the nasopharynx have been reported in the literature (Bernstein *et al.*, 1966). We present what we believe to be the first case of metastatic adenocarcinoma of the breast to the nasopharynx.

Case Report

A 58-year-old white woman underwent, in 1976, right radical mastectomy for infiltrating ductal carcinoma of the breast following a negative systemic metastatic work-up. Metastatic carcinoma was present, however, in three of sixteen axillary lymph nodes recovered during operation. Post-operatively she received adjuvant radiotherapy to the chest wall, and adjuvant cyclical systemic combination chemotherapy, for a period of 18 months.

In May 1983, she developed pulmonary nodules as evidenced by follow-up chest roentgenograms. Sputum cytology revealed adenocarcinoma cells consistent with metastasis from a breast primary (Fig. 1). The patient refused any treatment.

In February 1984, the patient presented with an enlarged 5 × 7 cm firm, mobile and non-tender left jugulo-digastric lymph node. The head and neck examination revealed a fungating and ulcerating midline mass in the nasopharynx, with extension to the fossa of Rosenmuller on both sides. A biopsy of this mass showed metastatic adenocarcinoma with focal necrosis. The morphologic and cytologic features were identical to those of the primary breast carcinoma (Figs. 2 and 3). She refused any systemic chemotherapy.

In May 1985, she developed signs and symptoms suggestive of panhypopituitarism. Endocrine studies and computerized axial tomography of the skull demonstrated metastasis to the sella with base of skull involvement. She was given replacement hormonal therapy and received radiotherapy to the sella, base of skull and nasopharynx. She died, in July 1985, of pulmonary insufficiency secondary to her metastatic disease.

Discussion

Metastatic carcinoma to the pharynx, hypopharynx and nasopharynx is extremely rare. An analysis of 1,000 autopsied cases of disseminated carcinoma included only 1 case with metastasis to the pharynx, with no further details (Abrams *et al.*, 1950). Only 2 cases of metastatic carcinoma to the hypopharynx (Dockerty *et al.*, 1968; Nguyen and Witzmer, 1983) and 4 cases metastatic to the nasopharynx from pulmonary and renal primaries (Bernstein *et al.*, 1966) have been reported in the literature. We believe that this is the first docu-

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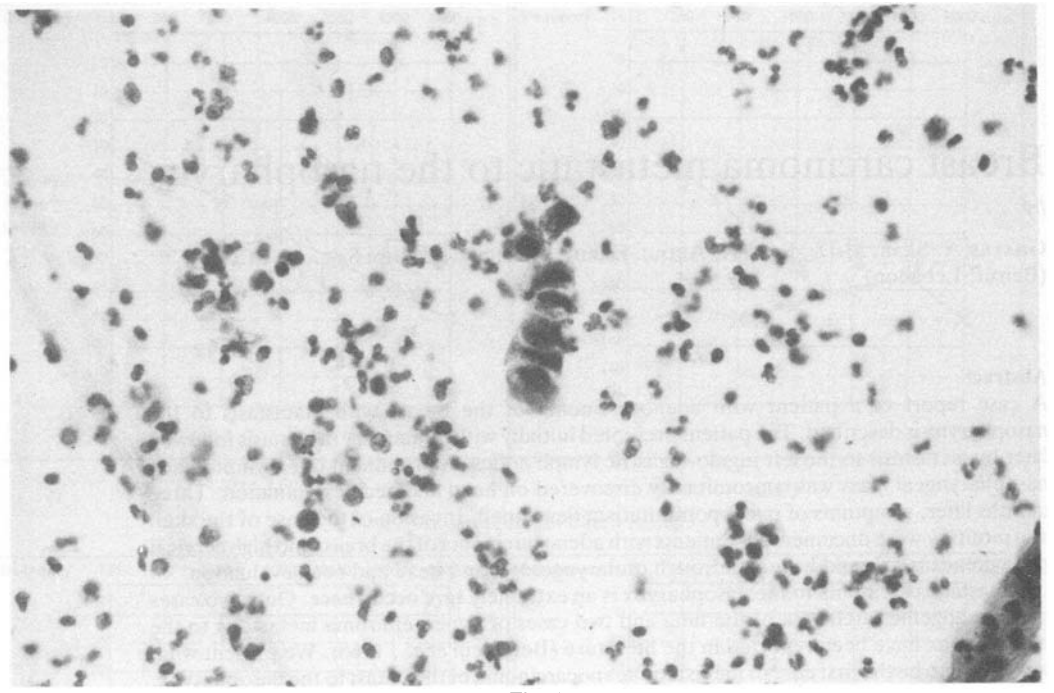


Fig. 1.

Sputum cytology showing malignant cells in an 'Indian File' arrangement consistent with an origin from a breast primary (Papanicolaou stain × 125).

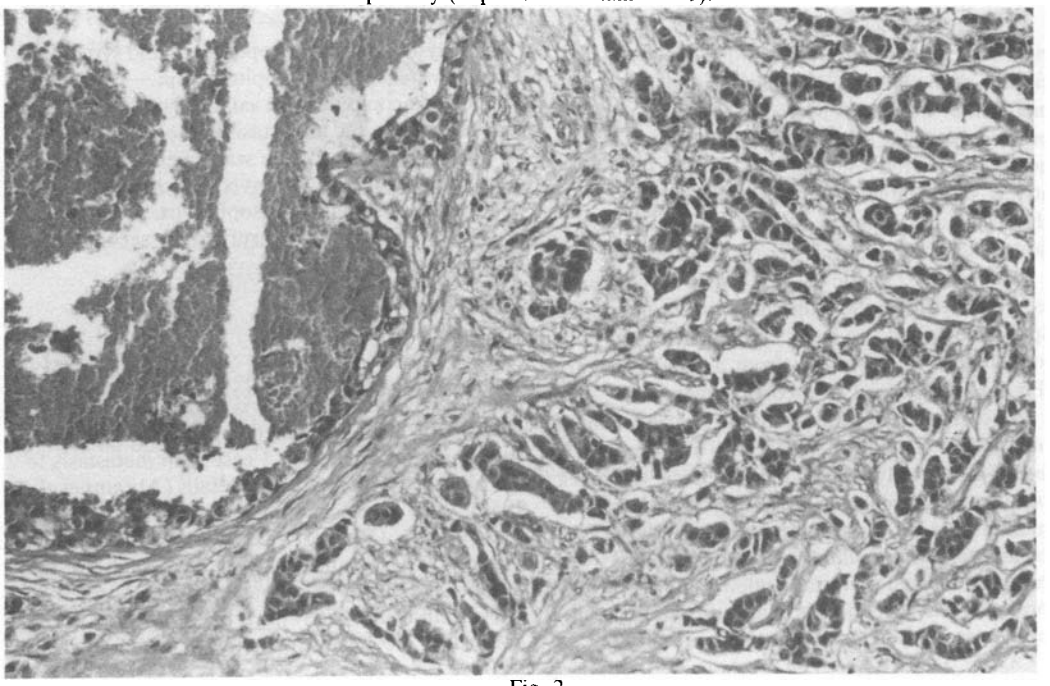


Fig. 2.

Intraductal and infiltrating duct carcinoma of the primary breast lesion (H + E × 125).

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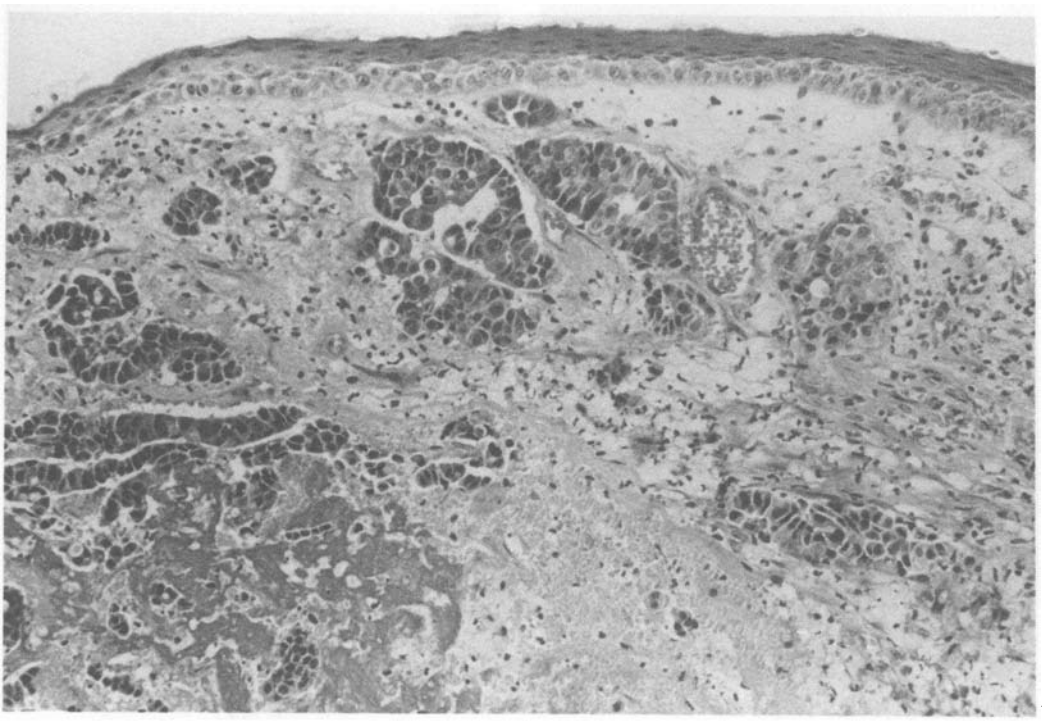


Fig. 3.

Biopsy of the nasopharyngeal mass showing metastatic adenocarcinoma with focal necrosis beneath a metaplastic squamous mucosa (H + E × 50).

mented case of metastatic breast carcinoma to the nasopharynx.

Metastatic adenocarcinoma of the breast to the high cervical lymph nodes, while grossly skipping the lower cervical chain of nodes, is a rare occurrence. We recommend that a thorough head and neck examination be undertaken in such patients to rule out the presence of a silent pharyngeal or nasopharyngeal metastasis. Such metastasis, if not detected early, could become symptomatic and difficult to control because of its potential to invade the base of the skull.

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