

Interesting Images

Metastatic Melanoma to the Central Nervous System: Case Report and Review of the Literature

Michael J. Schneck,^{*,†} Alkesh Patel,^{*} Adriana Rodriguez-Quinonez,^{*} Henry G. Brown,[‡] Joseph I. Clark,[§] Vikram Prabhu,[†] Rima Dafer,^{*} and José Biller^{*,†}

An elderly man with multiple hemorrhagic, presumed neoplastic lesions of the brain is described who could not undergo magnetic resonance imaging because of a pacemaker. On autopsy, metastatic melanoma was identified. In this report, we discuss the differential diagnosis of hemorrhagic metastases, the incidence and prognosis of metastatic melanoma to the brain, and the limited therapeutic options for metastatic melanoma.
Semin Cerebrovasc Dis Stroke 5:217-220 © 2005 Elsevier Inc. All rights reserved.

KEYWORDS hemorrhage, brain neoplasm, melanoma

Case Report

A 73-year-old right-handed man was admitted to an outside hospital for painless hematuria. He had cystoscopy and was found to have a low-grade papillary transitional cell carcinoma with no involvement of either the lamina or the muscularis propria. After the procedure, he developed postprocedural mental status changes. A computed tomography (CT) of the head without contrast showed multiple intracranial hemorrhages. He was transferred to a subacute care facility at the family's request and then readmitted to that outside hospital because of worsening dysarthria and confusion. The family then requested transfer to our institution in an attempt to ascertain the underlying pathology for the multiple intracranial hemorrhages.

The medical history was noteworthy for a history of mild memory difficulties of 6 months duration and removal of a basal cell carcinoma from the cheek several years before the admission. Other pertinent medical history included arterial

hypertension, non-insulin-dependent diabetes mellitus, prior myocardial infarction, gout, and benign prostatic hypertrophy. He also had a pacemaker for sick-sinus syndrome. Family history was noteworthy in that his mother had a history of skin "precancerous cells." Medications on admission included dexamethasone, insulin, glipizide, pantoprazole, metoprolol, tamsulosin hydrochloride, allopurinol, and pioglitazone hydrochloride.

Vital signs on admission were as follows: temperature, 36.7°C; blood pressure, 170/90 mm Hg; pulse, 62 per minute; and respiratory rate, 18 per minute. The general examination was unremarkable except for a midline sternotomy scar and pacemaker under the left chest wall. The patient opened his eyes only to noxious stimuli. He was non-verbal and unable to follow commands. On cranial nerve examination, he blinked to visual threat bilaterally. Funduscopy was unremarkable. Pupils were approximately 3.5 mm in size bilaterally and reactive. There were normal oculophthalmic responses. There was normal facial symmetry and corneal reflexes were intact. There was minimal withdrawal to pain in all four limbs and muscle stretch reflexes were diffusely hyperactive with no clonus but bilateral Babinski signs.

Admission laboratory studies were unremarkable. CT scan of the brain without contrast showed numerous high-density lesions throughout both cerebral and cerebellar hemispheres measuring 5 mm to 2.3 cm in diameter, with adjacent edema and slight rightward shift of the septum pellucidum due to mass effect; these lesions were suspicious for diffuse hemorrhagic metastases (Fig. 1A-C). These findings were un-

*Department of Neurology, Loyola University Chicago, Stritch School of Medicine, Maywood, IL.

†Department of Neurosurgery, Loyola University Chicago, Stritch School of Medicine, Maywood, IL.

‡Department of Pathology, Loyola University Chicago, Stritch School of Medicine, Maywood, IL.

§Department of Medicine, Division of Hematology/Oncology, Loyola University Chicago, Stritch School of Medicine, Maywood, IL.

Address reprint requests to: Michael J. Schneck, MD, Associate Professor of Neurology and Neurosurgery, Loyola University Chicago, Stritch School of Medicine, Maguire Building, Suite 2700, 2160 South First Avenue, Maywood, Illinois 60153. E-mail: mschneck@lumc.edu.

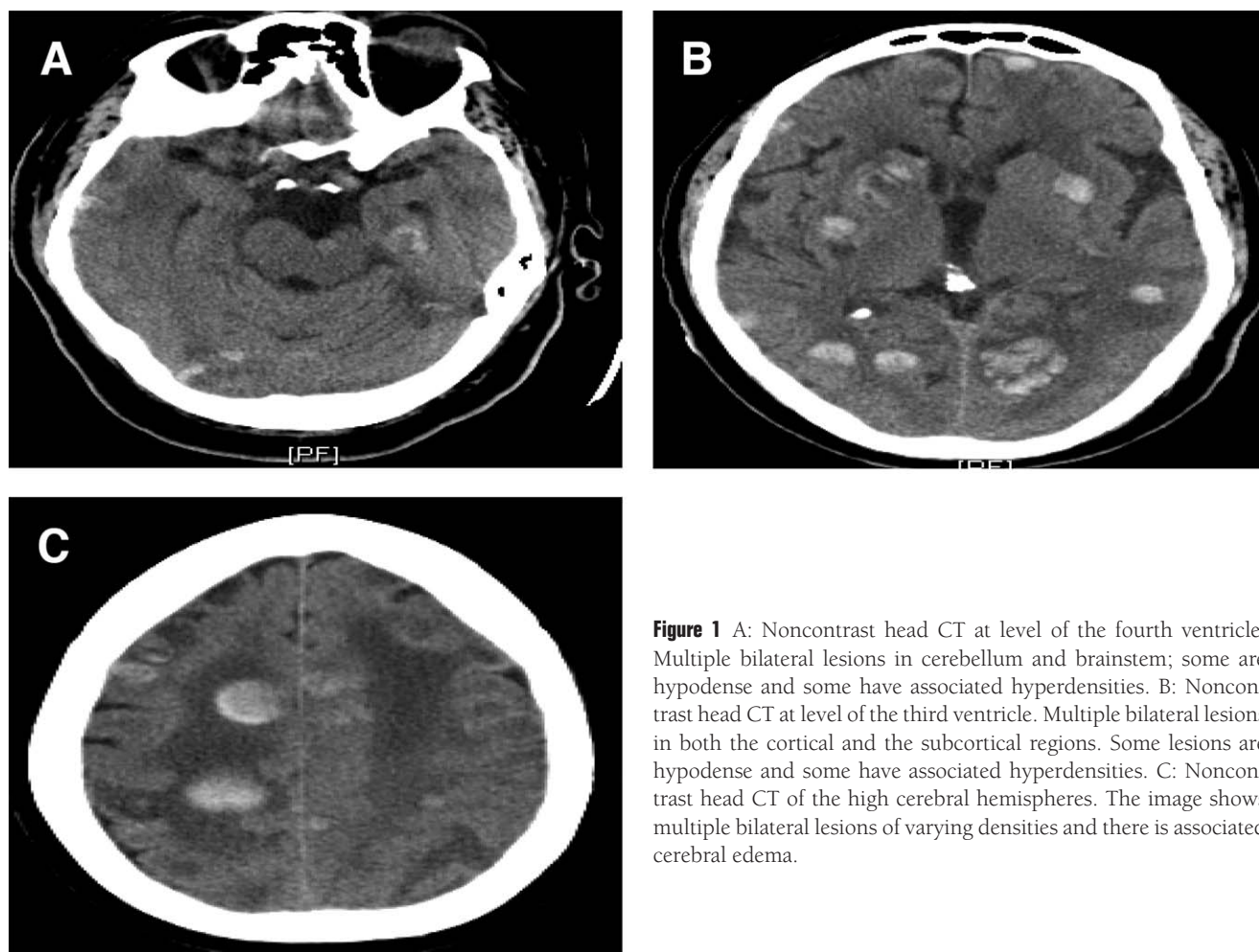


Figure 1 A: Noncontrast head CT at level of the fourth ventricle. Multiple bilateral lesions in cerebellum and brainstem; some are hypodense and some have associated hyperdensities. B: Noncontrast head CT at level of the third ventricle. Multiple bilateral lesions in both the cortical and the subcortical regions. Some lesions are hypodense and some have associated hyperdensities. C: Noncontrast head CT of the high cerebral hemispheres. The image shows multiple bilateral lesions of varying densities and there is associated cerebral edema.

changed as compared with the head CTs from the outside institution. Further diagnostic evaluation included CT of chest, abdomen, and pelvis that showed an enlarged multinodular thyroid gland, discrete tiny nodules in the right lung, and a small focal 2-cm low-density lesion in the posterior segment of the right lobe of the liver and multiple bilateral renal cysts. Renal ultrasound showed increased renal cortical echogenicity consistent with hypertension and multiple right renal cysts. Thyroid ultrasound showed discrete nodules in both thyroid lobes, some of which were partially cystic but too small for biopsy. Ultrasound of the abdomen again showed a 2-cm hypoechoic lesion of the right liver lobe and sludge in the gallbladder without evidence of cholecystitis.

A Dermatology consult was requested and a shave biopsy of an atypical lesion of the mons pubis was done; this was not diagnostic and only revealed a benign-appearing compound melanocytic nevus with slight atypia. Ophthalmology was consulted but no abnormal lesions were noted on ophthalmic examination. Pulmonary and Radiology consultants did not feel that the lung and liver lesions were large enough for biopsy. The patient was discussed at the neuro-oncology tumor board and Medical, Neurosurgical, and Radiation Oncology were consulted. The consensus was that the patient's morbid status precluded surgical biopsy or empiric treatment of the cerebral lesions.

Discussion with the family led to the patient's being transferred to a hospice facility. He died 3 days following discharge from our institution. Autopsy demonstrated metastatic melanoma with multiple hemorrhagic lesions to the brain (Fig. 2A-B), metastases to the abdominal and thoracic lymph nodes, foci of melanoma in the cardiac tissue, the submucosa of the stomach, and the mucosal wall of the small intestines. Immunoperoxidase staining with HMB-45 did not show infiltration of the Virchow–Robin spaces by tumor and the lesion was therefore felt to be metastatic as opposed to primary CNS melanoma. As an aside, the external examination was negative for malignant skin lesions. Note was incidentally made of acute tubular necrosis, multinodular goiter of the thyroid, bilateral bacterial pneumonic infiltrates, and diverticulosis of the large bowel. No liver nodules were identified.

Discussion

Intracranial neoplasms that present with hemorrhage may be primary or metastatic. Incidence of CNS metastases exceeds that of primary brain tumors by a ratio of 10:1.^{1,2} However, multiple focal lesions with hemorrhagic conversion more typically suggest metastatic disease, though occasionally pri-

Download English Version:

<https://daneshyari.com/en/article/9305772>

Download Persian Version:

<https://daneshyari.com/article/9305772>

[Daneshyari.com](https://daneshyari.com)