Lung adenocarcinoma: a new bipolar masquerader

Abdulrazak Alchakaki,¹ Mohamad Kabach,² Abdul Hamid Alraiyes,³ M Chadi Alraiyes⁴

¹Henry Ford Macomb,
Southfield, Michigan, USA

²Department of Medicine,
University of Miami Miller,
West Palm Beach, Deerfield
Beach, Florida, USA

³Department of Pulmonary
Diseases, Critical Care, &
Environmental Medicine,
Tulane University Health
Sciences Center, New Orleans,
Louisiana, USA

⁴Department of Hospital
Medicine, Cleveland Clinic,
Cleveland, Ohio, USA

Correspondence to

Dr M Chadi Alraiyes,
alraiyes@hotmail.com

DESCRIPTION

A 43-year-old woman, known to have bipolar disorder, presented with 4 months history of change in behaviour and functional status in addition to memory problem. Lately she started to have constant headache, fatigue and multiple episodes of postural syncope. This was associated with nausea, vomiting and weight loss. Her family doctor attributed her symptoms to bipolar disease without seeking further tests. She has a history of 30-pack-year tobacco smoking. Physical examination was remarkable for lethargy, flat affect, in addition to cognition and orientation impairment. The rest of her examination was unremarkable. Head CT scan showed multiple large heterogeneous hypodensities in both frontal lobes. Brain MRI demonstrated large bilateral frontal cystic and solid lesions, consistent with metastatic lesions (figure 1). These lesions were symmetrical around the midline and precluded subfalcine herniation. CT scan of chest abdomen and pelvis showed right lung apex (Pancoast tumour) mass with mediastinal lymphadenopathy (figure 2). Adrenal and liver lesions were detected as well. This was sufficient to stage the tumour and no positron emission tomography scan was performed. CT-guided biopsy of the lung mass was obtained and pathology examination declared poorly differentiated lung adenocarcinoma. TNM score was determined to be T3N2M1 based on imaging and histopathological findings. She underwent 14 sessions of radiation and systemic steroids, which led to partial recovery in her decision-making capacity. Disease extension and prognosis was discussed with the patient and she opted for hospice care only. After 5 weeks, the patient expired at home. In retrospect, it is obvious that she had precocious and unspecific features masquerading as her bipolar disorder. This was

Figure 2 CT scan of chest showed right lung apex (Pancoast tumour) mass with mediastinal lymphadenopathy.

very misleading and, therefore, resulted in major delay in diagnosis and early interventions required to increase survival and improve quality of life.¹⁻³

Learning points

- ▶ Cystic brain metastases arising from lung adenocarcinoma is very rare.
- ▶ Patients presenting with new or worsening neuropsychiatric symptoms should be worked up based on risk stratification for malignancy, infections and degenerative brain processes.
- ▶ Synchronous presentation of brain metastasis comprises less than 20% in patients with cancer.

Figure 1 Brain MRI with contrast showing multiple bilateral cerebral and cerebellar cystic and solid lesions, largest in the bilateral anterior-inferior frontal lobes. Surrounding vasogenic oedema is most prominent in the frontal lobes.

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