


IMAGING IN THORACIC CANCER

“Engagement ring” image conveys regrettable outcome for aged patients with non-small cell lung cancerHiromichi Yamane¹ , Hiroyuki Nishie², Nobuaki Ochi¹, Tomoko Yamagishi¹, Nozomu Nakagawa¹, Yasunari Nagasaki¹, Hidekazu Nakanishi¹ & Nagio Takigawa¹¹ Department of General Internal Medicine 4, Kawasaki Medical School, Okayama, Japan² Department of Anesthesia 2, Kawasaki Medical School, Kurashiki, Japan

A 92-year-old woman was referred to our hospital from a local nursing home because of a tonic-clonic seizure. Esophagogastroduodenoscopy had been performed at another clinic two months earlier after the patient had complained of appetite loss and a small bump on her forehead. No abnormal findings were observed and the cause of her bump was concluded as an accident. Thus, further examination was not planned.

Head computed tomography (CT) imaging on admission revealed an irregular-shaped tumor on the frontal bone invading into cranial dura mater (Fig 1). A hilar mass with pulmonary atelectasis in the left upper division bronchus was also observed on chest CT (Fig 2). The cause of the seizure was immediately proven to be symptomatic epilepsy as a result of brain invasion from skull bone metastasis of non-small cell lung cancer, which is considered a rare condition.^{1,2} Daily administration of levetiracetam (1000 mg) was initiated to control symptoms and the epilepsy was relieved.

Unfortunately only digestive tract disease was excluded after further examination when the patient complained of appetite loss. It is regrettable that a protruding bump on her forehead was misdiagnosed as mere swelling caused by an accident without further radiological examination using magnetic resonance imaging or CT. As evidenced by our case in which the patient's diagnosis was overlooked, current Japanese public health administration

Keywords

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Figure 1 Computed tomography image of the head resembles an “engagement ring.”

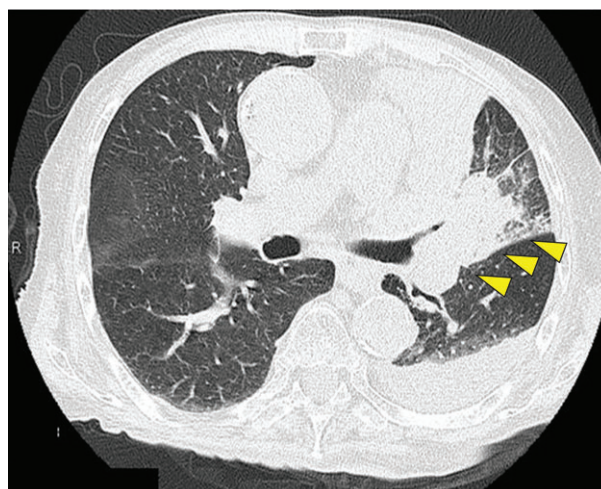


Figure 2 Chest computed tomography shows a hilar mass with atelectasis of the lingular segment (yellow arrow head).

services are inadequate, particularly for elderly, senile patients.³

Radiographical appearances, such as the “engagement ring” observed in this case, highlight issues with medical care of the elderly in Japan. We use the word “engagement” for two reasons: the CT image resembled an engagement (betrothal) ring; and to represent the engagement (promise) between a doctor and patient. In this case, the patient had complained of symptoms two months before transfer to our hospital; however, she did not receive the medical care she expected and she suffered from appetite loss for two months. Reported symptoms should always be comprehensively investigated, regardless of the age or mental health of the patient. In addition, physicians should be aware of this rare condition because lung cancer is reported to be the second cause of metastatic skull bone tumors, which are usually asymptomatic.⁴

Disclosure

No authors report any conflict of interest.

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