

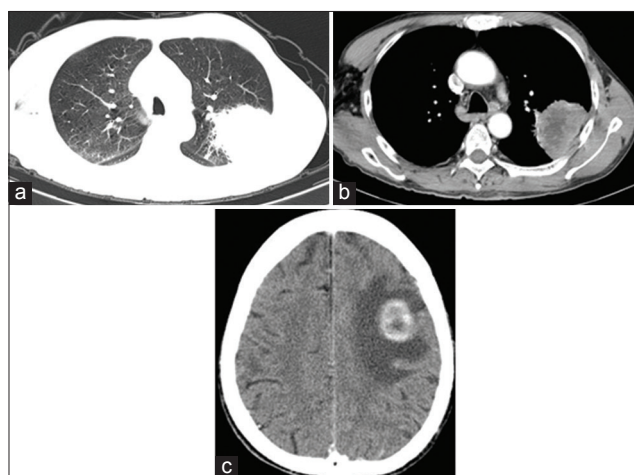
# Lung Poorly differentiated Adenocarcinoma with Cerebral Metastases

Cun-Jin Ge<sup>1,2</sup>, Gan Mou<sup>1,2</sup>, Wei Liu<sup>1,2</sup>

<sup>1</sup>Institute of Digestive Disease, China Three Gorges University, Yichang, China, <sup>2</sup>Department of Gastroenterology, Yichang Central People's Hospital, Yichang, China

## INTRODUCTION

A 61-year-old man was transferred to our hospital with dizziness and gait disturbance that had progressed over the preceding 2 weeks. Four weeks before presentation, he had presented to fever clinics with hemoptysis and fever and received a diagnose of mild Coronavirus disease 2019 pneumonia by nucleic acid test. Chest computed tomography (CT) scan showed the neoplasm in the left upper lung [Figure 1a and b], and findings on CT-guided percutaneous lung biopsy were consistent with poorly differentiated adenocarcinoma, which was one of non-small cell lung cancer (NSCLC). He suffered an epileptic fit, accompanied with progressive muscular weakness in the right limbs. A physical examination revealed positive reflex of Babinski sign. Given the recent changes in the patient's mental status and pathological reflex, iodine contrast medium-enhanced CT imaging of the head was performed and confirmed numerous lesions, some with ring enhancement, substantial edema, and mass effect [Figure 1c]. Cerebral metastases were considered to be the most plausible explanation, but the differential diagnosis of the brain lesions also included tuberculosis, bacterial abscesses, and neurocysticercosis. Direct microbiologic detection and cultures were negative for tuberculosis and the human immunodeficiency virus. A diagnosis of lung poorly differentiated adenocarcinoma with cerebral metastases was made. Lung cancer is considered as a globally widespread disease, which is the main cause of tumor-associated mortality, with about 2 million cases of lung cancer-associated mortality per year.<sup>[1-3]</sup> NSCLC accounts for most of primary cases, the majority of which present with advanced and unresectable disease once diagnosed, which indicate a poor prognosis.<sup>[4,5]</sup> In the recent years, promising therapeutic effect has been achieved in patients with advanced NSCLC by targeted therapy and immunotherapy.<sup>[6-9]</sup> However, the presence of distant metastasis remains leading to high mortality in patients with NSCLC.



**Figure 1:** Lung poorly differentiated adenocarcinoma with cerebral metastases. (a and b). Axial contrast medium-enhanced computed tomography (CT) image of lung neoplasm; (c) axial contrast medium-enhanced CT image of cerebral metastases

<sup>[10,11]</sup> After a well-informed discussion of options for anti-tumor drugs with the patient's family, the decision was made to pursue bevacizumab combined with chemotherapeutics. He was charged home with clinical symptomatic relief and outpatient follow-up after a period of treatment.

## ACKNOWLEDGMENTS

**Funding:** This work was supported by National Natural Science Foundation of China (31600134).

## FOOTNOTE

**Conflicts of Interest:** The authors have no conflicts of interest to declare.

### Address for correspondence:

Wei Liu, Institute of Digestive Disease, China Three Gorges University, 8 Daxue Road, Yichang 443000, China.

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## ETHICAL STATEMENT

The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this “Images in Clinical Medicine.”

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**How to cite this article:** Ge C, Mou G, Liu W. Lung Poorly differentiated Adenocarcinoma with Cerebral Metastases. *J Clin Res Oncol* 2020;3(2):1-2.