

Huge Arachnoid Cyst Presenting as Cough Headache

Hui-Chen Su¹, Meng-Tsang Hsieh¹, Yung-Chu Hsu²

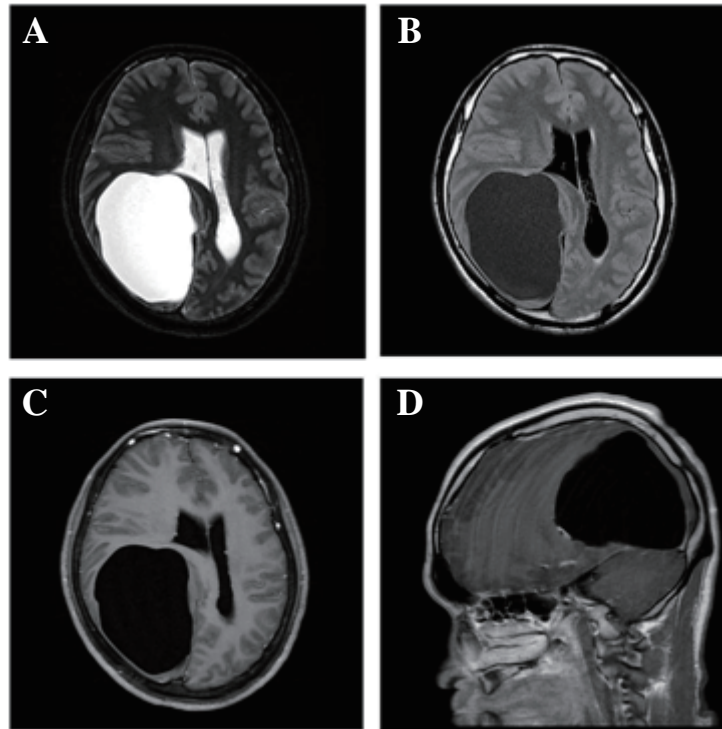


Figure 1. Brain magnetic resonance imaging (1.5T) (A) Axial T2 STIR, (B) Axial T2 FLAIR, (C) T1 with Gadollinium enhanced, (D) Saggital T1 FLAIR showed a huge cystic lesion in right occipital area with uncal and transtentorial herniation.

A 42-year-old man presented to our clinic with episodic diffuse thunderclap headache occurring over the past 5 months. His headache, which lasted from hours to one day, was always exacerbated by coughing and exertion. Neurologic examination was unremarkable. Brain magnetic resonance imaging with gadollinium demonstrated a huge arachnoid cyst with lateral ventricle compression (Figure.). After surgery, he was free from headache.

From the ¹Department of Neurology National Cheng-Kung University Hospital, Tainan, Taiwan, ²Division of Neurology, Department of Internal Medicine, Ditmanson Medical Foundation Chia-Yi Christian Hospital.

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Correspondence to: Yung-Chu Hsu, MD, Division of Neurology, Department of Internal Medicine, Ditmanson Medical Foundation Chia-Yi Christian Hospital. 539 Jhongsiao Rd., Chiayi City, Taiwan.

E-mail: chessergg@gmail.com

Cough headache is an uncommon headache. It usually affects patients over the age of 40^(1,2). Symptomatic cough headache are found in about 40% of the cases⁽²⁾. They tend to have additional headache triggers, more associated symptoms, stronger pain intensity, and more diverse headache durations and locations. According to a report of nine symptomatic cough headache patients by Chen et al.⁽³⁾, the headache usually are bilateral and the headache duration ranged from 10 seconds to 30 minutes. Symptomatic cough headache is mostly attributable to Chiari malformation (65%), following posterior fossa lesions (15%), and vertebrobasilar disease. Rarely, subdural hematoma, brain metastasis or spontaneous intracranial hypotension had been reported^(1,2). Thus, neuroimaging is highly recommended when approaching patients with newly-onset of cough headache.

The pathophysiology of primary cough headache remained not well understood. It seems associated with an increased intra-thoracic and intra-abdominal pressure subsequently resulting in an increase in the central venous pressure. The other hypothesis about cough headache were also proposed, including transverse or jugular vein stenosis⁽⁴⁾, lower threshold for pain tolerance⁽⁵⁾, systemic infection altering the vascular tone⁽⁶⁾, and more crowded posterior cranial fossa with relative obstruction of CSF flow⁽⁷⁾.

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