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COLLOID CYST: A CASE REPORT AND LITERATURE REVIEW OF A RARE BUT DEADLY CONDITION

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□ **Abstract—Background: Colloid cysts are congenital benign tumors accounting for 0.2–2% of all intracranial neoplasms but representing 15–20% of all intraventricular masses. Emergency Physicians are more likely than any other group to encounter patients with a colloid cyst, a rare but life-threatening condition. The most common presenting complaint is severe episodic attacks of headache in a frontal location with associated nausea and vomiting. Objectives: To describe a rare but potentially life-threatening cause of headache so that clinicians will rapidly recognize the significance of the condition and institute timely appropriate therapy. Case Report: We describe the case of a 40-year-old man with a severe headache accompanied by confusion who was diagnosed with obstructive hydrocephalus associated with a colloid cyst in the third ventricle. Conclusion: Recognition of this rare but important diagnosis should prompt the Emergency Physician to obtain timely treatment so that rapid neurologic deterioration, herniation, and death can be prevented. A review of the pathophysiology, diagnosis, and current management is discussed.** © 2011 Elsevier Inc.

□ **Keywords—colloid cyst; hydrocephalus; third ventricle; headache; papilledema**

INTRODUCTION

Patients present to the Emergency Department (ED) commonly with complaints of headache. In the United States, 2.1 million patients per year present to the ED with the chief complaint of headache, which is approximately 1–4% of all ED visits. Fortunately, only 5.5% of headaches are believed to have a pathological cause (1). Emergency Physicians use clinical judgment aided by careful history and physical examination when evaluating patients with headaches. In some cases, ancillary testing such as computed tomography (CT) scanning or spinal fluid analysis is used to help the clinician differentiate benign headaches from those that have the potential to cause significant morbidity or mortality. The purpose of this article is to describe one rare but potentially life-threatening cause of headache so that clinicians will rapidly recognize the significance of the condition and institute timely appropriate therapy to prevent neurologic deterioration.

CASE REPORT

A 40-year-old white man presented to the ED with a 2-month history of intermittent headaches. Over the 2 weeks before admission, the headaches worsened and were associated with four episodes of vomiting. At the time of evaluation, the headache was described as constant, severe, and bilateral. The patient denied vision changes or fever. His past medical history was unremarkable except for hypertension treated with atenolol and a

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remote tonsillectomy and adenoidectomy. He had a 25 pack-year history of smoking but denied alcohol abuse or illicit drug use. The remainder of his social history was non-contributory.

On presentation his vital signs were: blood pressure 164/89 mm Hg, heart rate 64 beats/min, temperature 37.2°C (98.9°F), respiratory rate 18 breaths/min, and pulse oximetry 98%. General examination revealed that the patient was awake, uncomfortable, and cooperative, but confused as to the year. Glasgow Coma Scale score was 14 (eyes = 4, motor = 6, verbal = 4). Fundoscopic examination demonstrated bilateral papilledema. Examination of cranial nerves II–XII was within normal limits. Pupils were 5 mm bilaterally and reactive. Motor examination showed strength was 5 out of 5 in both the upper and lower extremities bilaterally. There was no drift, deep tendon reflexes were 2+ in the upper and lower extremities bilaterally. Sensation was intact to light touch, pin prick, and proprioception. Cerebellar testing including finger-to-nose alternating movements in the upper extremities and heel-to-shin in the lower extremities was intact and symmetric bilaterally. His gait was normal. The remainder of the examination was unremarkable.

Cranial CT scan without contrast was obtained and demonstrated a midline hyperdensity at the intraventricular foramina of Monro (interventricular foramina) consistent with a colloid cyst with associated moderate ventriculomegaly (Figure 1).

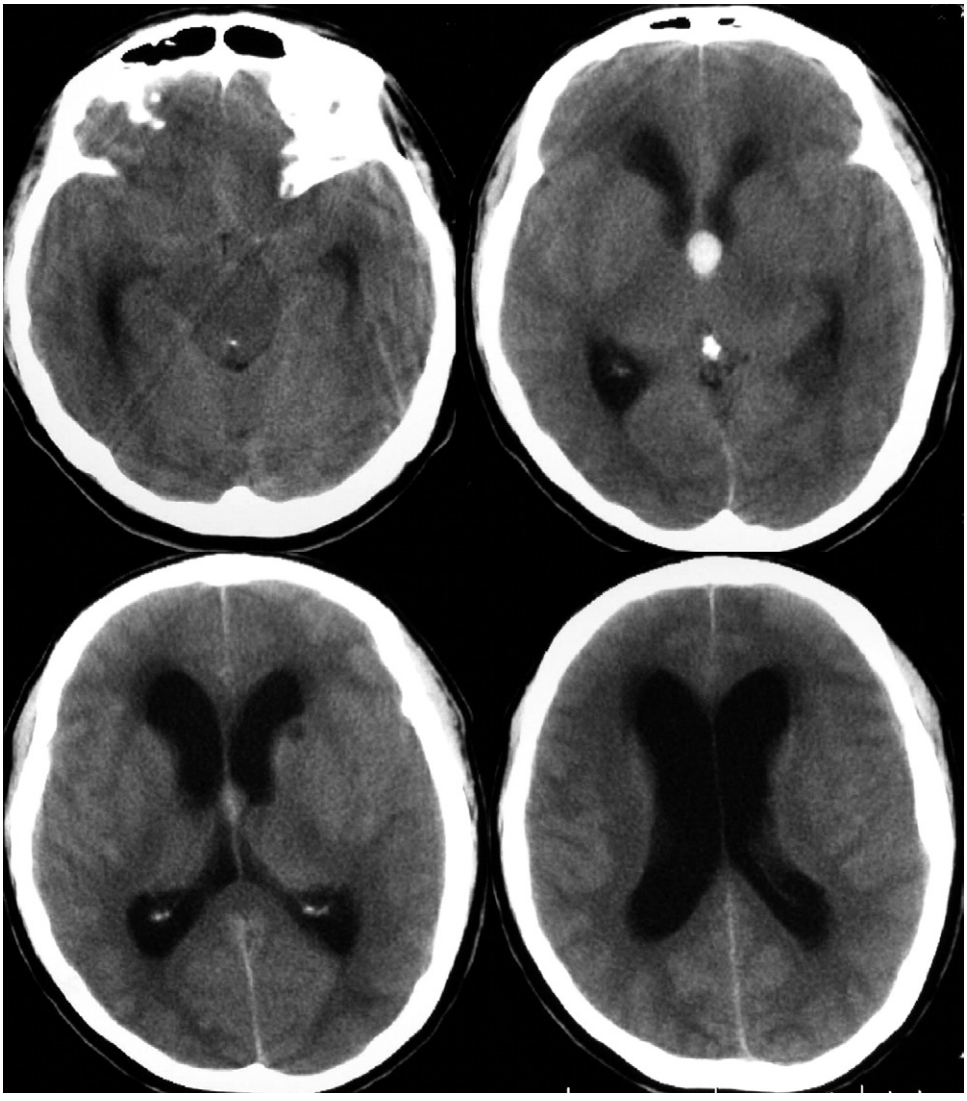

Figure 1. Non-contrast computed tomography scan of the brain demonstrates a midline hyperdensity at the interventricular foramina of Monro consistent with a colloid cyst with associated moderate ventriculomegaly. Note the abnormal temporal horn dilatation in both temporal lobes.