



CASE REPORT

Meningioma with cystic change mimicking hemangioblastoma



Keng-Liang Kuo ^{a,b}, Chih-Lung Lin ^{a,b}, Yu-Feng Su ^{a,b,*}

^a Division of Neurosurgery, Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung, Taiwan

^b Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

Received 24 November 2014; received in revised form 30 December 2014; accepted 24 April 2015
Available online 14 September 2015

KEYWORDS

cystic meningioma;
hemangioblastoma;
magnetic resonance
imaging;
Nauta et al's
classification

Abstract Meningiomas are common in nonglial intracranial brain tumors. However, cystic meningiomas, such as hemangioblastoma, pilocytic astrocytoma, metastatic brain tumor, and neuroblastoma, are rare and should be differentiated from other brain tumors with cystic characteristics. Accurate diagnosis is crucial for patients with brain tumors, but diagnosing cystic meningiomas is difficult despite the advances in computed tomography, magnetic resonance imaging, and magnetic resonance spectrometry. In this report, we share our experience regarding a case of cystic meningioma mimicking hemangioblastoma and discuss its management. An intraoperative frozen section is warranted to overcome the difficulty in disease diagnosis.

Copyright © 2015, Taiwan Surgical Association. Published by Elsevier Taiwan LLC. All rights reserved.

1. Introduction

Meningiomas are common in nonglial intracranial brain tumors and account for 13–26% of primary intracranial tumors,¹ whereas cystic meningiomas are rare and account for only 1.6–10% of all meningiomas.² Appropriate diagnosis of brain tumor is crucial not only for formulating an appropriate treatment plan, but also in prognosis and chemoradiotherapy. Differential diagnosis varies with astrocytoma, metastatic tumor, ganglioglioma, pleomorphic

Conflicts of interest: All authors declare no conflicts of interest.

* Corresponding author. Neurosurgical Department, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Number 100, Tzyou 1st Road, Kaohsiung 807, Taiwan.

E-mail address: suyufeng@ms.kmuh.org.tw (Y.-F. Su).

<http://dx.doi.org/10.1016/j.fjs.2015.04.003>

1682-606X/ Copyright © 2015, Taiwan Surgical Association. Published by Elsevier Taiwan LLC. All rights reserved.

xanthoastrocytoma, and neuroblastoma.³ We report a case of a patient with left frontal cystic meningioma, and a mural nodule mimicking hemangioblastoma and lacking the typical characters of meningioma.

2. Case Report

A 37-year-old female, a hepatitis B carrier with no other systemic disease, visited the emergency department because of involuntary right-side limb movement, without loss of consciousness. The patient did not report other episodes of discomfort, such as headache, giddiness, nausea, or vomiting. The patient was suspected to have intracranial lesion; thus, brain computed tomography (CT) was conducted. The CT revealed a large (4.6 cm × 3.0 cm × 4.0 cm) left frontal mass lesion with a cystic component and perifocal edema. Brain magnetic resonance imaging (MRI) through gadolinium enhancement revealed cerebrospinal fluid enrichment within the septated cyst, a centrally located enhancing mural nodule measuring 1.27 cm × 0.73 cm, and perifocal edema (Figure 1). Suspecting supratentorial hemangioblastoma, the tumor was approached through the supine position. A cystic tumor with xanthochromic content was observed after a left frontal craniotomy and dura take-up suture (Figure 2). The grayish tumor was centrally located, away

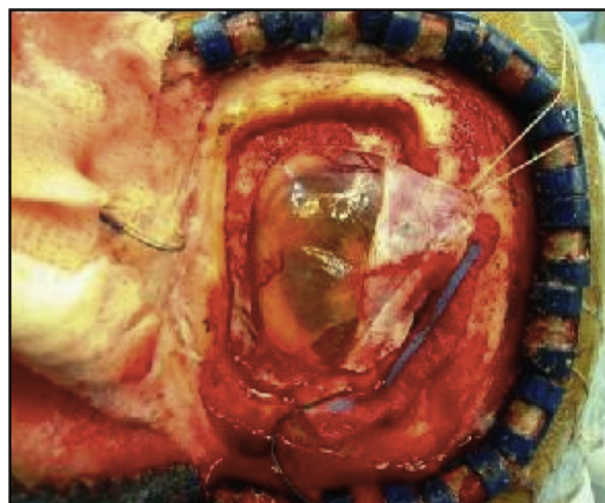


Figure 2 After craniotomy and dura take-up suture, a transparent mass lesion over the surface is noted. Xanthochromic content is noted while removing the tumor.

from the cystic component. A cytological study of the fluid within the cyst was conducted. Owing to the suspicion of hemangioblastoma and the lack of cystic wall thickening, gross removal of the tumor without the cystic component

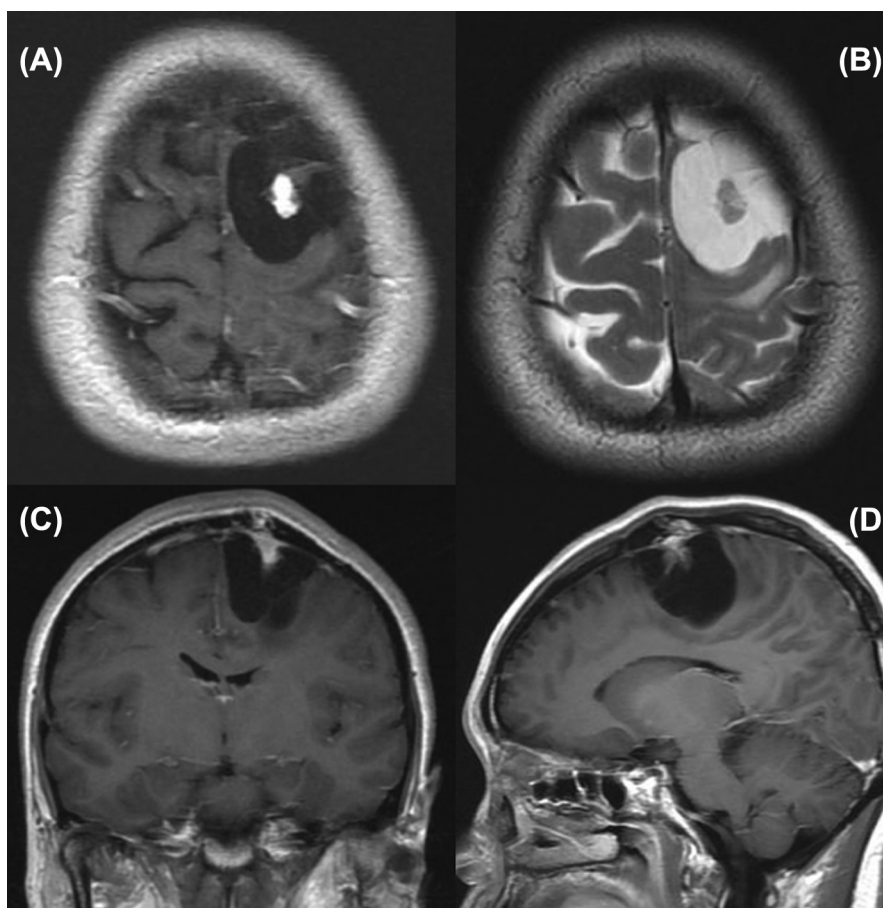


Figure 1 Intra-axial cystic-like lesion over the left frontal area, with a mural nodule. (A) Contrast-enhanced axial T1-weighted image, (B) axial T2-weighted image, (C) coronal T1-weighted image, and (D) sagittal T1-weighted image.

Download English Version:

<https://daneshyari.com/en/article/6250814>

Download Persian Version:

<https://daneshyari.com/article/6250814>

[Daneshyari.com](https://daneshyari.com)