

Case Report

Acute epidural hematoma due to spinal venous angioma: A case report

Shiro Chitoku, M.D.^{a,*}, Iwao Nishiura, M.D.^a, Miyuki Fukuda, M.D., PhD^b,
Shigeru Amano, M.D., PhD^c

^a Center of the Spinal Surgery, Nipponbashi Hospital, Osaka-shi, Osaka, Japan

^b Department of Neurosurgery, Kyoto University, Kyoto-shi, Kyoto, Japan

^c Sakuragaoka Pathological Diagnostic Clinic, Kusatu-shi, Shiga, Japan



ARTICLE INFO

Keywords:

Acute spinal epidural hematoma
Venous angioma
Surgical treatment

ABSTRACT

Background: Spinal epidural cavernous angioma was reported about 4% of all spinal epidural tumors, mostly generating as a primary lesion in the vertebral bone. Spinal epidural hematoma (SEDH) due to angioma without primary origin was very rare, which reported in the English literatures was only 10 cases including our case. The main symptoms were numbness and pains and motor weakness owing to the acute compression signs of cord and roots. Emergency surgical treatment was required for the good surgical results.

We present a rare case of cervical acute epidural hematoma due to ruptured venous angioma.

Case presentation: A 78-year-old man, who suffered from sudden severe right suboccipitalgia., and sent to our hospital. He also noticed progressive numbness and motor weakness over his bilateral upper and lower extremities after the onset. Cervical CT and MRI showed acute intracanal hematoma over the right side of the cervical spine at C2 to C6. Emergency operation was performed 13 h after the onset. His sensory and motor symptoms were disappeared quickly after the operation. Pathological examination revealed spinal epidural hematoma due to venous angioma.

Conclusion: This case presented with acute progressive deterioration of paresis and sensory disturbance, and required emergency operation. Early diagnosis and emergency surgical treatment are essential for the therapy of acute spinal epidural hematoma due to venous angioma.

1. Introduction

Spinal epidural hematoma due to the vascular lesion is a rare disease that is mainly found in the thoracic spine and presents slow growth [1–3]. Spinal epidural cavernous angioma was reported about 4% of spinal epidural tumors, mostly generating as a primary lesion in the vertebral bone [4]. However, reported cases of acute epidural hematoma due to primary epidural angioma were very rare. Epidural angioma usually shows slowly progressive symptoms along with the growth of the lesion, and it has been reported to have a good surgical outcome. Upon reviewing the reported cases of acute epidural hematoma due to angioma [2,5–12], only 50% of the cases showed full recovery from the neurological deficits. We discuss the factors associated with good surgical results of spinal acute epidural hematoma due to angioma.

1.1. Case presentation

A 78-year-old man had been treated with anti-platelet drug for cerebral infarction since 62 years of age. He also took drugs for hypertension and diabetes mellitus. He suddenly suffered from severe right suboccipitalgia. He was taken to our hospital by ambulance. CT scan at emergency room revealed no intracranial hemorrhage. Neurological examination at emergency room revealed no clear neurological deficit except for the severe pain at cervical and occipital portion. He was treated with infusion and anti-inflammatory drug. He noticed numbness over his right upper extremity 6 h after the onset, and his numbness was gradually deteriorated with paresis and pain over his right upper extremity 8 h after the onset. Cervical MRI was performed, and indicated acute epidural hematoma over the right side of the cervical spine at C2 to C6. Emergency operation was performed 13 h after the onset.

Abbreviations: CT, computed tomography; MRI, magnetic resonance imaging; MMT, manual muscle test; AEDH, acute epidural hematoma; JOA, Japan orthopedic association

* Corresponding author at: Division of Neurosurgery, Shiraniwa Hospital, 6-1-10 Shiraniwadai, Ikoma-shi, Nara 6300136, Japan.

E-mail address: chitoku.s@allpines.jp (S. Chitoku).

<https://doi.org/10.1016/j.inat.2017.11.007>

Received 20 July 2017; Received in revised form 17 September 2017; Accepted 12 November 2017

2214-7519/© 2017 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

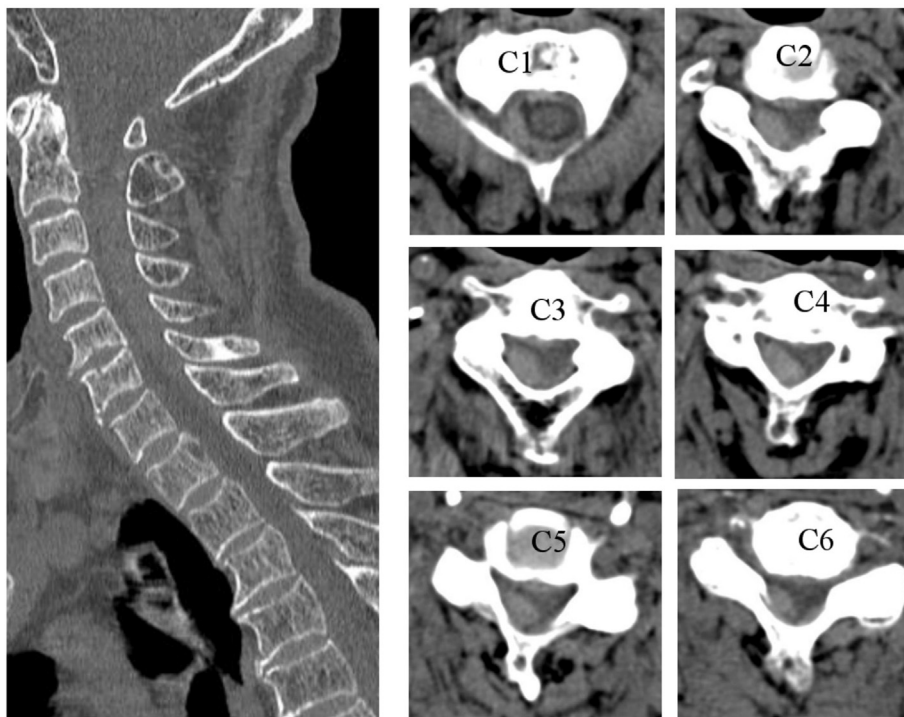


Fig. 1. CT showed an isodensity epidural mass over the right dorsal side that compressed the dural sac.

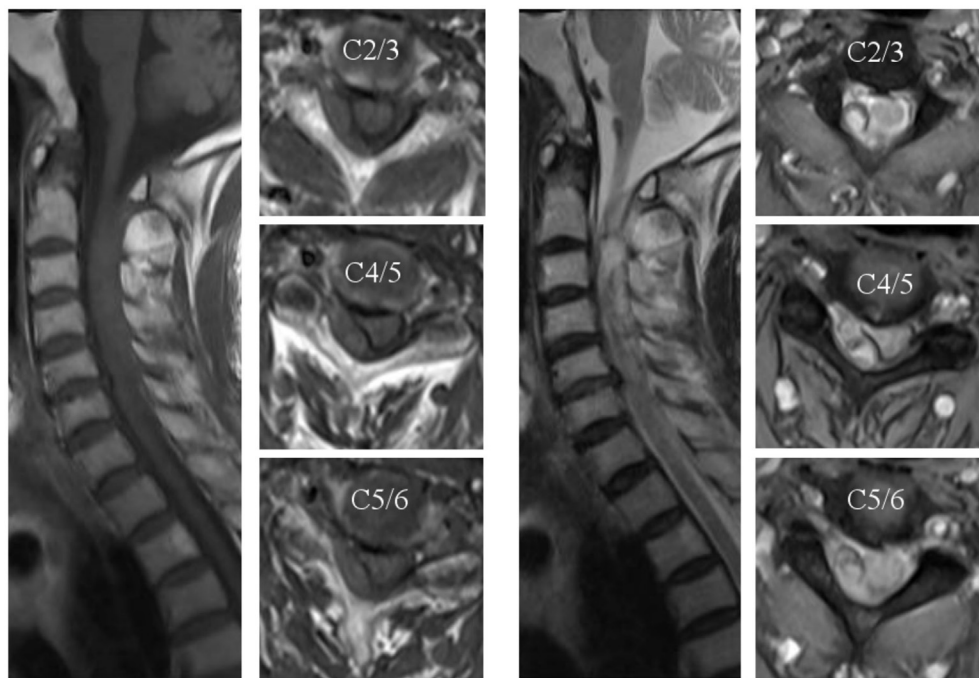


Fig. 2. MRI T1-weighted images (Left) and T2-weighted images (Right) indicated acute epidural hematoma with isointensity on T1-weighted image, and iso-/relatively high intensity on T2-weighted image.

1.2. Hematological data

Hematological examination was performed 9 h after the onset. All the hematological datum, bleeding time, coagulation datum was obtained 11 h after the onset, which revealed within normal limits.

1.3. Preoperative neurological findings

His clinical symptoms had been deteriorating. He presented bilateral paraplegia (MMT: 1/5) and severe paresis over the right upper paresis (MMT 1/5), and moderate paresis over the left upper extremity (MMT 3/5). As for sensory function, severe numbness over the right

upper extremity, and moderate numbness over the bilateral lower extremities and left upper extremity. Deep tendon reflex were severe hypo-active over the right upper extremity and bilateral lower extremities. He reported urinary disturbance. The severity of compressed region at cervicothoracic junction evaluated using the Japan Orthopedic Association (JOA) scoring system was 4/17.

1.4. Radiological findings

Cervical CT showed a relatively high-density mass at C2 to C6 (Fig. 1). Cervical MRI indicated thick epidural hematoma over the right dorsal side at the C2–C6 level, which compressed the cervical cord and roots (Fig. 2).

Download English Version:

<https://daneshyari.com/en/article/8684903>

Download Persian Version:

<https://daneshyari.com/article/8684903>

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