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Epidural Arteriovenous Fistula in the Cervical Spine Associated with Unilateral Upper Extremity Pain - A Case Report -

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- Abstract -

We experienced a rare case of an epidural arteriovenous fistula, which presented with symptoms similar to those of cervical radiculopathy. An 18-years-old woman suffered from neck pain, which radiated to the left upper extremity for 4 months. On neurologic examination, there were sensory impairments of the left C4 to C8 dermatomes and intermittent weakness in both lower extremities after exercise. An MRI of the cervical spine demonstrated a mass, which produced a serpentine-like signal void within the spinal canal from C1 to C7. The feeding artery of the fistula and the arterialized epidural venous plexus within the spinal canal were found on vertebral angiography. One year after an endovascular embolization with platinum coils, the clinical symptoms resolved and complete resolution of the arteriovenous fistula was confirmed by angiogram and MRI scan.

Key Words: Epidural Arteriovenous Fistula, Endovascular Embolization

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1,2)

3).

(AV shunting)

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8 . 4 1 7 가 (Fig. 1A) signal void
C3-4
(Fig. 1B, Fig. 2).
MRI (AV shunting)

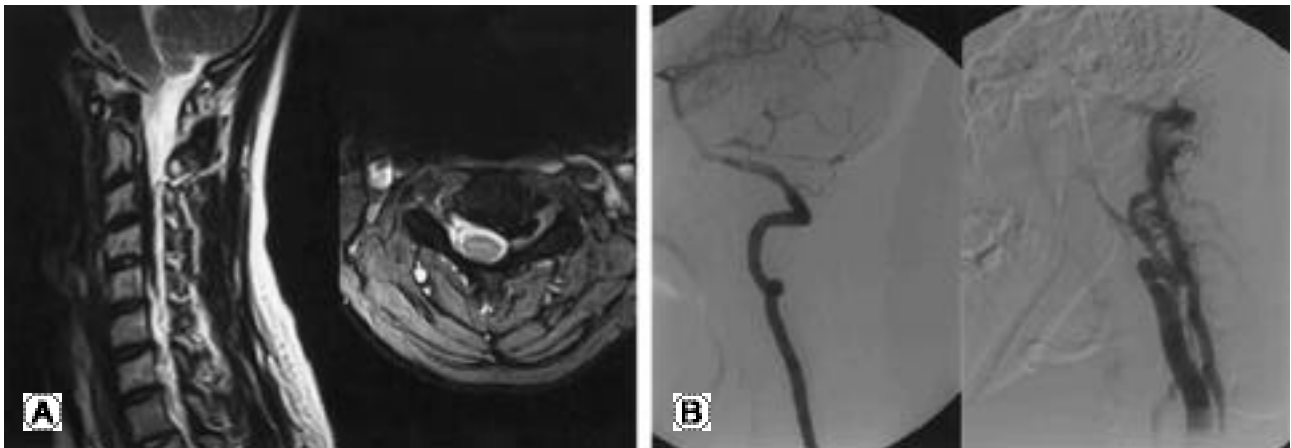


Fig. 1. (A) Pre-embolization MRI at C3-4 level. The cervical dura is compressed by dilated, engorged epidural veins and feeding artery is located in the left C 3-4 intervertebral foramen. (B) Left vertebral angiography shows cervical vascular abnormality comparing to normal right side vertebral artery.

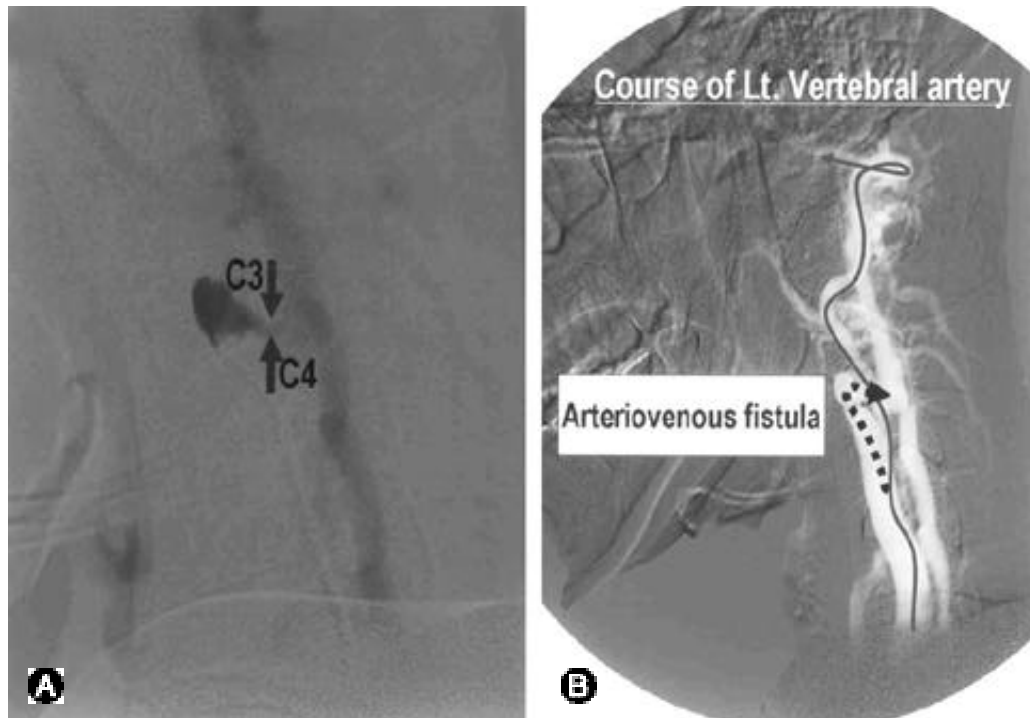


Fig. 2. (A) Abnormal fistular flow through feeding artery is shown at C3-4 intervertebral foramen. (B) Schematic drawings of the left vertebral angiogram.

(Fig. 3)
MRI

(Fig. 4).

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(feeding artery) (fistula)가
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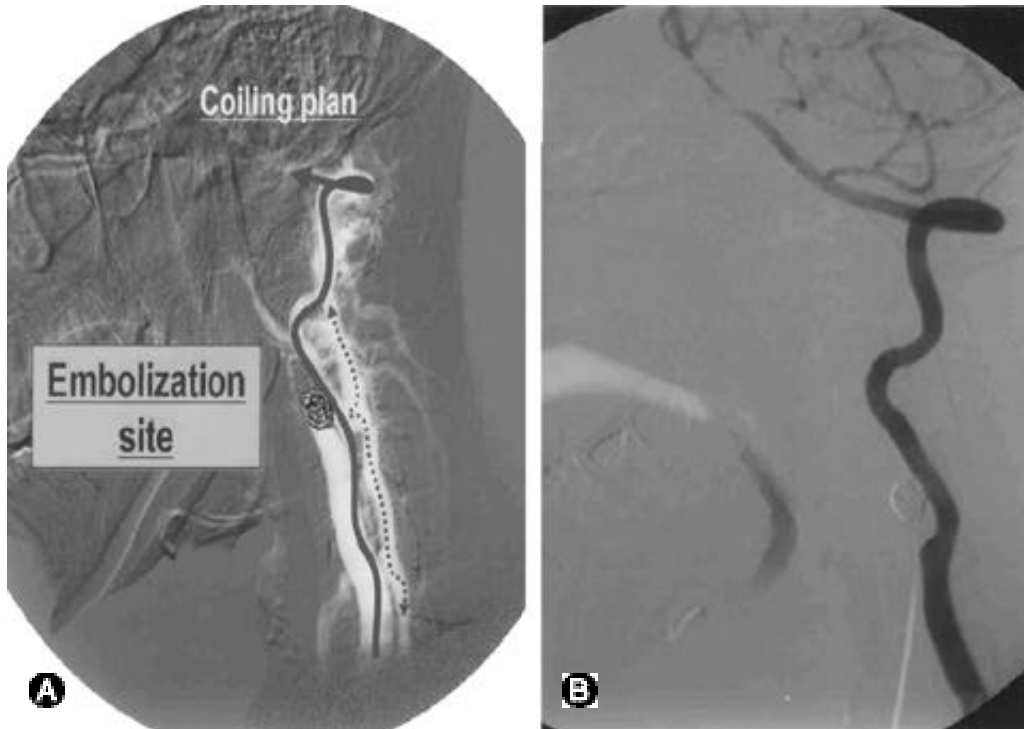


Fig. 3. (A) Schematic plan of the endovascular embolization with platinum coils. (B) Post-embolization angiography shows the complete loss of the extradural arteriovenous fistula and the preservation of left side vertebral artery.

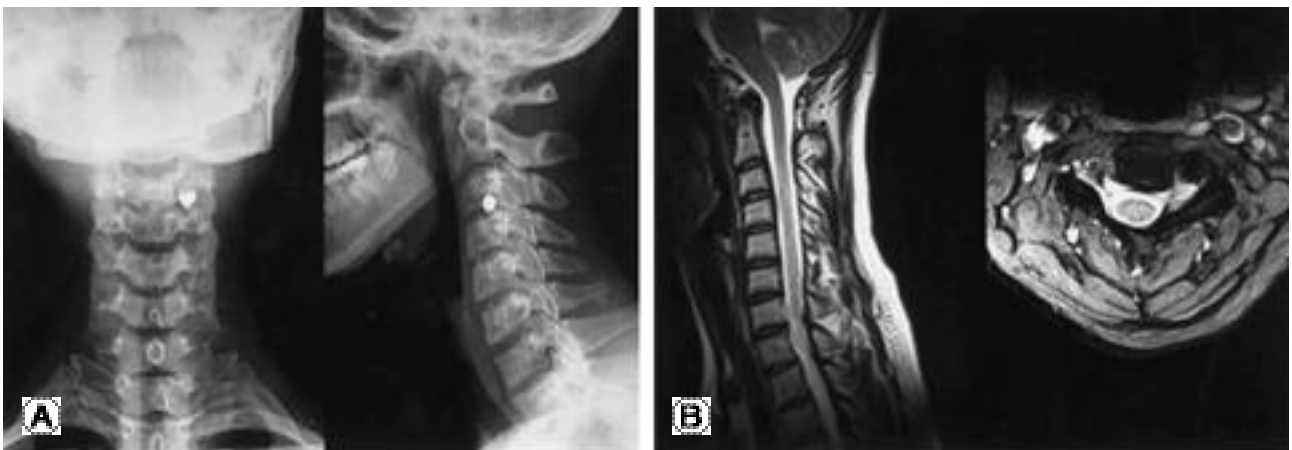


Fig. 4. (A) Postoperative cervical radiogram. (B) Postoperative cervical spine MRIs show the complete loss of the extradural arteriovenous fistula.

1,3,6-8)

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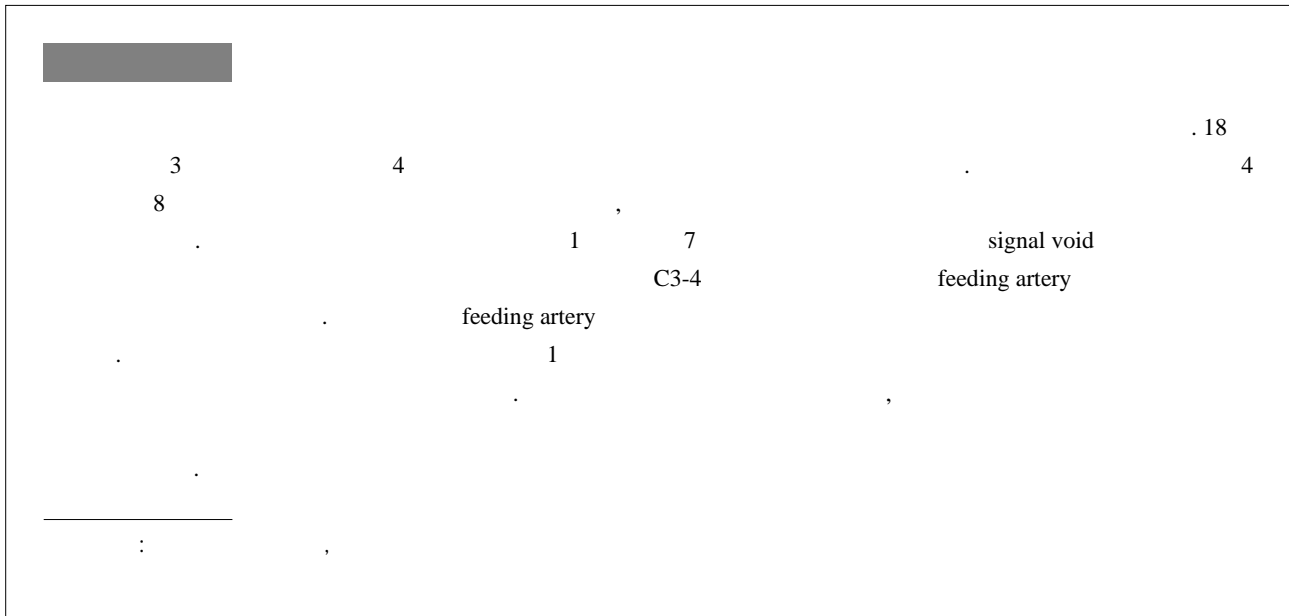
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Spetzler²⁾

(feeding artery)

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