

IMAGES IN EMERGENCY MEDICINE

Neurology

Woman with atraumatic neck pain

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A middle-aged woman presented to the emergency department (ED) complaining of sudden onset of posterior neck pain. She was on apixaban for atrial fibrillation, but there was no history of trauma. The patient complained of neck pain, but physical examination was unremarkable with normal neurological findings during presentation. A cervical spine x-ray was performed at triage (Figure 1) and the emergency physician ordered a computed tomography (CT) of the cervical spine with contrast (Figure 2). Magnetic resonance imaging (MRI) of the cervical spine was performed on the same setting after consultation with the spine surgeon (Figure 3) in the ED.



FIGURE 1 Normal sagittal view of plain cervical spine x-ray

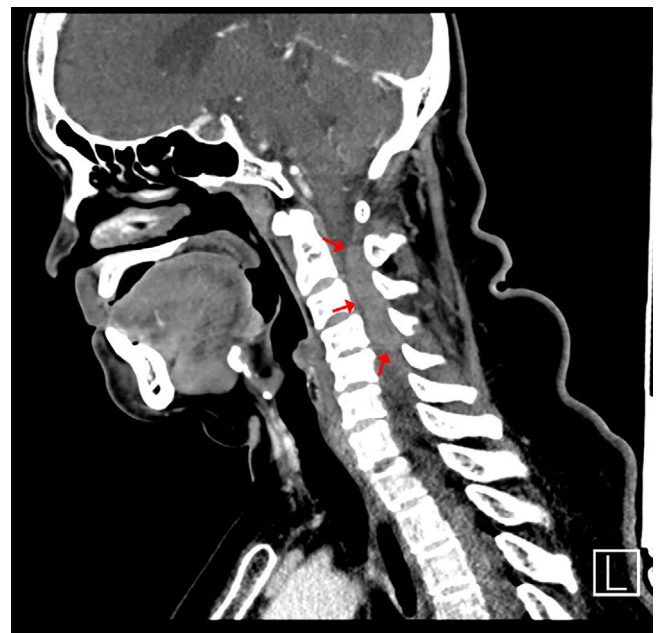


FIGURE 2 Sagittal view of computed tomography of cervical spine with contrast. Long hyperdense mass in posterior epidural space (red arrows)

1 | DIAGNOSIS

Spontaneous spinal epidural hematoma. CT cervical spine with contrast revealed a $1.5 \times 0.9 \times 4.9$ cm hyperdense mass in the posterior epidural space causing severe narrowing of the central canal. MRI cervical spine (T2-weighted) confirmed this epidural collection with characteristics of an acute hematoma with a hyperintense and heterogenous appearance. Patient underwent emergency C3 to C5

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FIGURE 3 Sagittal view of T2-weighted magnetic resonance imaging of cervical spine. Multilobulated epidural collection extending from C2 to C5 (red arrows)

hemilaminectomy and evacuation of the epidural hematoma on the same day. Patient was discharged on postoperative day 4 with normal neurological functions.

Spontaneous spinal epidural hematoma (SSEH) is a rare condition that is associated with trauma, coagulopathy, vascular malformation, tumor, or iatrogenic procedure. This condition requires early recognition and is a surgical emergency.¹ Preoperative neurologic deficit and delays in treatment are important factors affecting postoperative morbidity.² The classical presentation of SSEH is sudden onset of neck pain followed by rapid progressive neurological deficits. MRI is the preferred modality for diagnosis as it is difficult to differentiate hematoma from tumor or abscess using CT.³

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