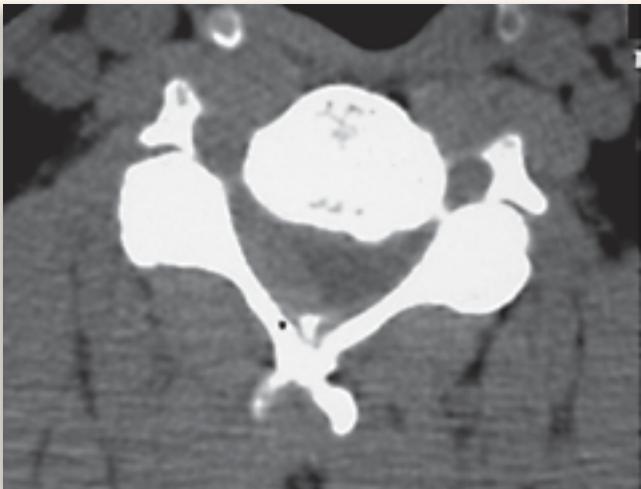




# Emergency Case

## A major pain in the neck

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**A** 54-year-old man presented to our emergency department with sudden spontaneous onset of pain in his neck. The pain was sharp and radiated into both arms. He had never had this pain before. Results of examination were unremarkable; bowel and bladder function were normal. He had undergone an aortic valve replacement 2 years earlier and was taking prophylactic warfarin.

He was in some distress from pain but was afebrile, and his vital signs were normal. His blood pressure was similar in both arms, and he had no cardiac murmurs. There was generalized tenderness of the paraspinal muscles of his neck and upper back, and he had a slight weakness in his

right arm when he extended his elbow. Over the course of a few hours, this progressed to weakness in both arms. Laboratory studies showed his international normalized ratio to be 2.9, but all other results were normal.

### What unusual diagnosis must be considered in this case?

1. Transverse myelitis
2. Spinal epidural hematoma
3. Pathologic cervical fracture
4. Spinal epidural abscess

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## Answer to Dermacase

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experience transient weakness of the small muscles of the hand that lasts 2 to 3 weeks.<sup>7</sup> Botulinus toxin therapy is becoming increasingly popular among patients with localized hyperhidrosis despite its high cost and side effects.

Surgical options in management of hyperhidrosis include excision of axillary tissue, axillary liposuction, and thoracic sympathectomy.<sup>3</sup> Excision of axillary tissue aims to eliminate most of the axillary sweat glands. Complications of this method include wound infection, slow healing, wound hematoma, wound dehiscence, hidradenitis, and necrosis at the edge of the skin.<sup>3</sup>

Axillary liposuction involves removal or destruction of the apocrine glands along with disruption of nerve supply to the sweat glands.<sup>3</sup> Axillary liposuction will likely be the surgical treatment of choice for axillary hyperhidrosis refractory to more conservative measures.

One of the final options in managing hyperhidrosis is thoracic sympathectomy, which is done under general anesthesia as day surgery. It involves disruption of the second, third, and fourth thoracic ganglia and is successful in 87% to 98% of patients with palmar-axillary hyperhidrosis. Patients with respiratory impairment and pleural adhesions are not suitable for this surgery. Complications of thoracic sympathectomy include compensatory sweating, Horner syndrome, pneumothorax, hemothorax, thoracic duct injury, and phrenic nerve injury.

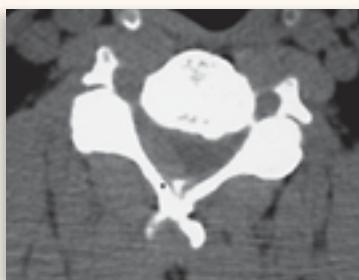
Family physicians can have an important role in recognition and treatment of hyperhidrosis, thus relieving patients of the psychosocial burden of this condition.

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## Answer to Emergency Case

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**Figure 1.** Computed tomography scan at the level of C4 vertebra showing an epidural hematoma pushing the spinal cord to the left and forward

## 2. Spinal epidural hematoma

This patient has a spontaneous (ie, nontraumatic) spinal epidural hematoma (SEH) from approximately the second to fifth cervical vertebrae (Figure 1). He immediately underwent laminectomy and decompression, made a full recovery, and was discharged 9 days later.

Traumatic SEH is well recognized and, when it causes spinal cord compression, is a true neurosurgical emergency. Although most commonly associated with major blunt trauma, it has also been described in association with spinal surgery,<sup>1</sup> epidural anesthesia,<sup>2</sup> and spinal manipulation.<sup>3</sup>

Spontaneous or nontraumatic SEH has also been reported<sup>4</sup> in association with fibrinolytic and anti-coagulant agents<sup>5</sup> and with congenital and acquired coagulopathies.<sup>6,7</sup> The incidence of nontraumatic SEH is unknown. Although uncommon, this diagnosis needs to be remembered when any patient has spontaneous onset of back pain that is otherwise unexplained. Patients' use of anticoagulants should increase suspicion. Most importantly, any patient with unexplained back pain and neurologic findings urgently needs imaging studies and specialty consultation.

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