



Osteophyte piercing of the dura

H. Urbach¹  · E. Kaya¹ · U. Hubbe²

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Teaching Neurolmages: Osteophyte piercing of the dura

A 34-year-old man complained of sudden onset of orthostatic headache lasting for 2 weeks. Magnetic resonance imaging (MRI) of the head was normal, the cerebrospinal fluid (CSF) opening pressure was 6 cm H₂O, and the body mass index (BMI) was 22.6 kg/m². Dynamic myelography (Fig. 1a) and computed tomography (CT) myelography (Fig. 1b, c) revealed a CSF leak at the Th2/3 level caused by a 3 mm large penetrating osteophyte. Surgical repair (Fig. 1d) with resection of the osteophyte and ligation of the dural tear resulted in complete relief of the patient's symptoms.

Ventral, vertical dural tears are a typical cause of CSF leak-related intracranial hypotension [1]. Fluoroscopy or CT-guided epidural blood patch may lead to substantial improvement but is typically not sufficient to seal the leak and to get the patients free of symptoms [2]. Exact delineation of the dural tear by (repeated) dynamic myelography, dynamic CT myelography or digital subtraction myelography is mandatory. Dural tears are typically located along the lower cervical and thoracic spine [2] and patients have a low BMI [3].

Conflict of interest H. Urbach, E. Kaya and U. Hubbe declare that they have no competing interests.

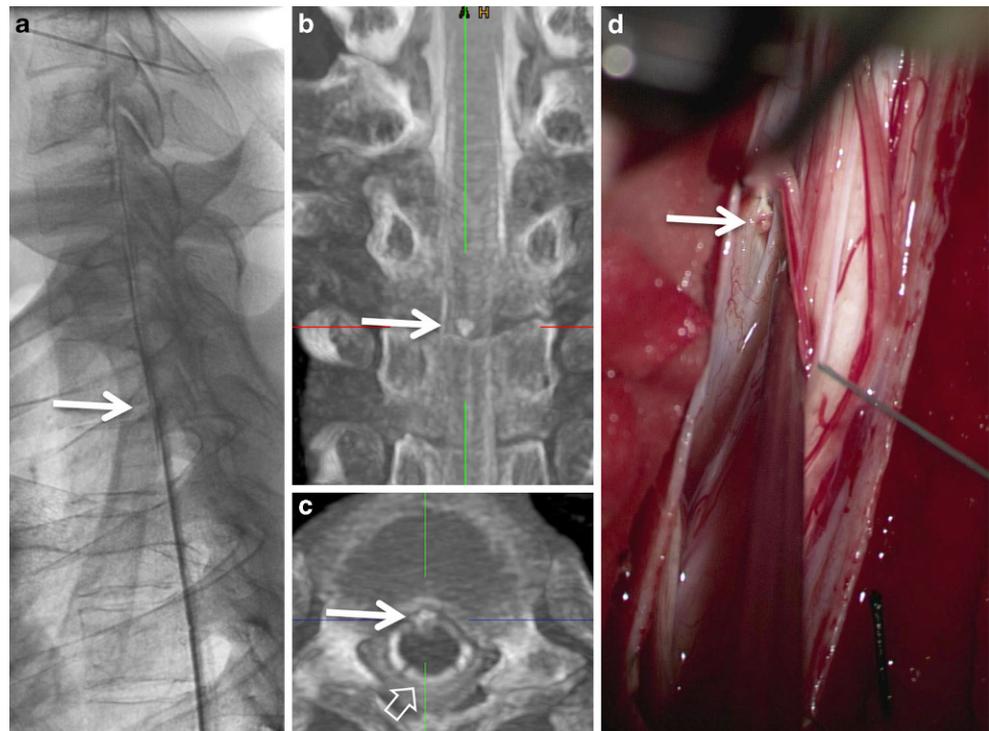
Author contributions H. Urbach: Analysis and interpretation of data. U. Hubbe: Acquisition of data. E. Kaya: Acquisition of data.

✉ H. Urbach
horst.urbach@uniklinik-freiburg.de

¹ Dept. of Neuroradiology, Medical Center University of Freiburg, Breisacher Str. 64, 79106 Freiburg, Germany

² Dept. of Neurosurgery, Medical Center University of Freiburg, Freiburg, Germany

Fig. 1 Dynamic myelography with the patient in prone and head down-position (**a**) shows a CSF leak at a small osteophyte originating from the Th2/3 level (**a**: *arrow*). CT myelography (**b**, **c**) and intraoperative view (**d**) depict the dural tear and the osteophyte more clearly, the intrathecal space has a low volume and contrast material is visible in the epidural space (**c**: *hollow arrow*)



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