LETTER TO THE EDITOR

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Headache, Atypical Facial Pain, and a Syrinx

The presence of a syrinx may be commonly associated with an underlying neural tube defect such as a Chiari malformation; however, syringomyelia associated with other conditions is less well understood. One hypothesis proposes that a syrinx may arise when the flow of cerebral spinal fluid is disrupted,[1] supporting the theory of posttraumatic syringomyelia. The formation of these cysts is thought to be a result of previous injury, sometimes not appearing until months or years following the trauma.[2] A syrinx may result in pain, sensory weakness, reduction in reflexes, gradual loss of motor function, and even movement disorders.[3] It is often associated with neuropathic pain caused by compression of fibres of the anterolateral tract. Involvement of the upper cervical cord may result in facial or head symptoms because of the involvement of the descending sensory nucleus of the trigeminal nerve. We present a case of an upper cervical cord syrinx to demonstrate the anatomic compression of the trigeminal sensory nucleus.

A 46-year-old man presented with headache and atypical facial pain. He had a long-standing history of intermittent, brief (seconds), lancinating pain from the right side of his head into his right shoulder, with symptoms persisting for at least 35 years. The symptoms would come and go over months with weeks of frequent, daily, or hourly occurrences of pain, interspersed with periods of months in which he was completely pain-free. His symptoms were characterized by exacerbations and remissions that did not seem to have an obvious pattern. He had not taken medication for these episodes and was not substantively disabled by them; instead, his quality of life was affected. His neurological examination, and in particular the sensory examination, was normal. Imaging revealed a 3 × 6 mm benign syrinx at the cervicomedullary junction anatomically juxtaposed to the location of the descending spinal nucleus of the trigeminal nerve. There was no evidence of spina bifida or Chiari malformation. A remote history of childhood head trauma, described as a serious concussion after falling off of a bicycle, was noted. However, he was treated conservatively at home and did not require hospital admission, making the event of uncertain significance. In a previous case series of 44 patients, Anderson et al reported that syringomyelia at the cervicomedullary junction can result in facial, neck, and upper extremity pain or numbness. The choice of intervention proved difficult because some patients experienced symptoms that did not progress over time.[4] In this case, the syrinx is believed to be the source of his pain syndrome. At follow-up, several weeks later, he had evolved

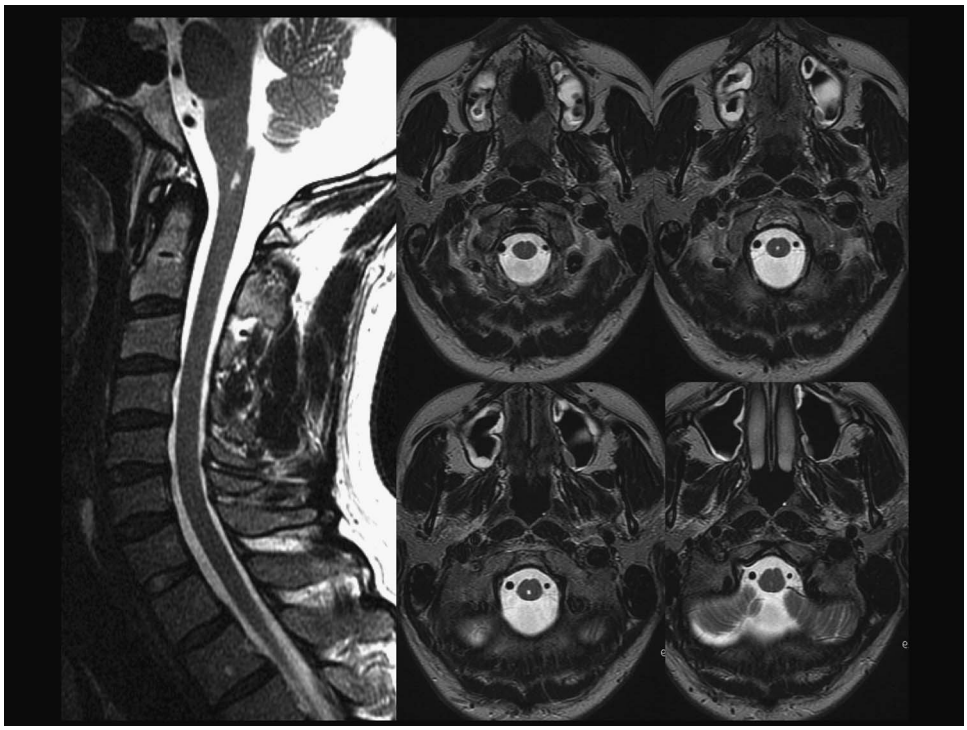

Figure 1: *Sagital and axial T2 weighted MR images demonstrating a medullary syrinx.*

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to a pain-free period and did not want medical intervention. He was managed conservatively and offered follow-up if his pain symptoms returned. No further imaging (e.g. a cerebrospinal fluid flow study) was done.

Statement of Authorship

All authors contributed equally to this submission.

Disclosures

The authors have nothing to disclose.

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