

Iatrogenic cervical syringomyelia associated with acupuncture

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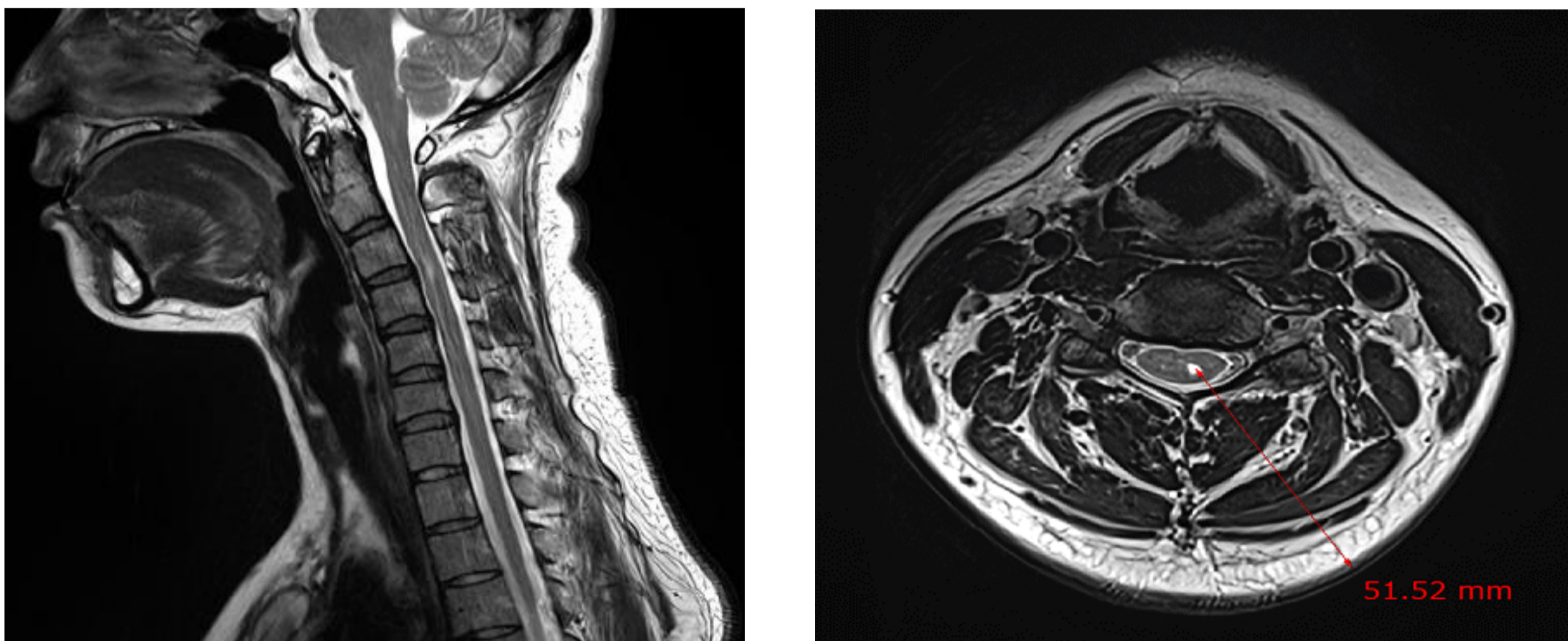
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Sung-Hun Lee, Eun-Young Kang, Hyun-Kyung Lee, Yun-Kyung Cho**Introduction**

We present a case report of a 27-year-old woman, with cervical syringomyelia at Cervical 3-4 level followed by acupuncture.

Case

A 27-year old woman, 5 months ago, visited Korean Medicine clinic due to left posterior neck pain and she was recommended for acupuncture around the cervical 3-4 level. Immediately after the injection, she felt a lightning strike, and the pain lasted for several minutes. Since then, she complained of persistent and worsening pain and tingling paresthesia in her left upper limb. She had no history of any disease or spinal surgery. On neurologic examination, she had no motor weakness, bladder and bowel problem, but reported allodynia, decreased sensations of pain, temperature and touch around the left C5-7 dermatomes. The elbow, knee and ankle reflexes were intact. The magnetic resonance imaging(MRI) of cervical spine reported a prominent cystic lesion in left central cord of C3-4(syrinx). On examination of median SEP, latency of N13 was not delayed, but ambiguous and amplitude was significantly decreased compared with right side. Symptomatic treatment for left arm numbness and pain was conducted, including selective nerve root block. She reported both the frequency and intensity of the pain were halved.

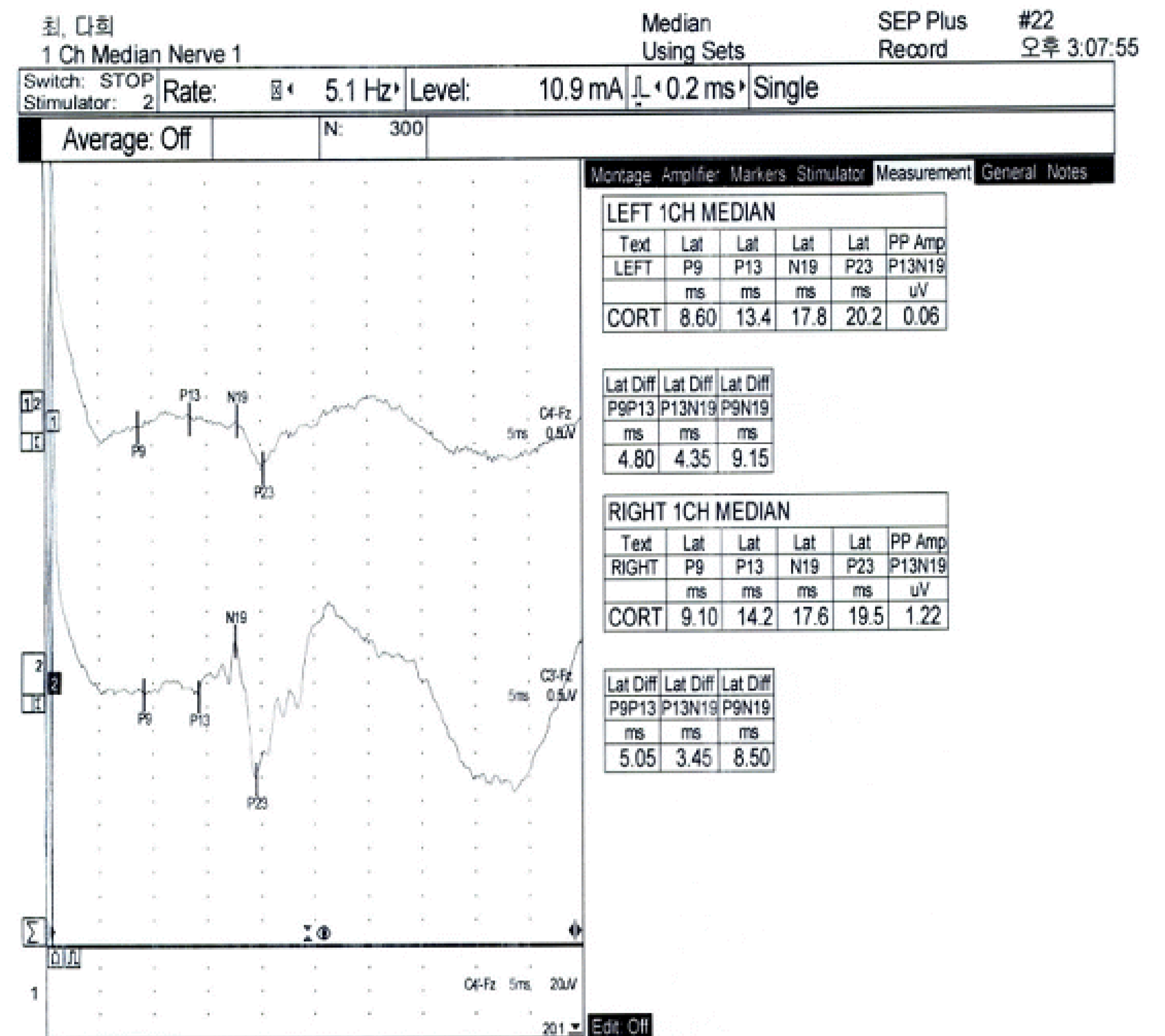
Figure 1. Cervical spine MRI was performed 2months after onset of symptoms



(A) Sagittal magnetic resonance imaging showed cystic lesion in left central cord of C3-4(syrinx).

(B) Axial magnetic resonance imaging at the level of C3-4 showed syrinx, the deviated type. The distance from the skin to the cord was about 5cm.

Figure 2. Median SEP



On examination, Lt median SEP was more ambiguous and showed decreased amplitude compared with right one.

Discussion

Syringomyelia is a rare disorder characterized by abnormal fluid-filled cavities or cysts within the spinal cord, of which the reported prevalence was 8.2 to 8.4 per 100,000 in Western countries. The etiology of syringomyelia can include Chiari malformation, trauma, arachnoiditis, and idiopathic origin. Among them, posttraumatic syringomyelia accounts for 7.5% of the total. The syrinx is classified into 4 types: central, enlarged, deviated, and bulkhead depending on the shape seen by MRI. Among them, it has been reported that neuropathic pain is more accompanied by the deviated type, which is a type limited to unilateral dorsal horn. In this case, when comprehensively considering MRI, electromyography, neurologic exam and clinical symptoms, it seems that a long needle entered at least 5cm from the skin through the left C3-4 interlaminar space, an area not protected by bone. and it caused direct damage to the spinal cord. Direct spinal cord injury by a needle is an absurd accident with few precedents. Indiscriminate treatment without knowledge only causes catastrophic accidents, so the therapeutic areas should be clearly distinguished according to the respective educational courses of doctors and oriental doctors.