

## Posttraumatic Psychogenic Clubfoot: The Importance of Recognition

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We observed a case of delayed foot drop in a 41-year-old woman after a trivial in-car accident without neural or spinal injuries. She suffered from a psychogenic clubfoot over four years. About 3 months after the accident, insidious foot drop was noticed. It progressed and eventually she could not walk without a brace. She wandered from hospital to hospital without success. An electrophysiological examination was normal. Clinical psychometric examination revealed relatively low intelligence quotient (IQ 86), unstable emotion, somatic over-sensitivity, aggression and anger. We diagnosed her disease as the psychogenic clubfoot. We report such a case, including clinical presentation, management, and review some medicolegal issues.

**Key Words:** Clubfoot · Conversion disorder · Malingering · Diagnosis · Causality



### INTRODUCTION

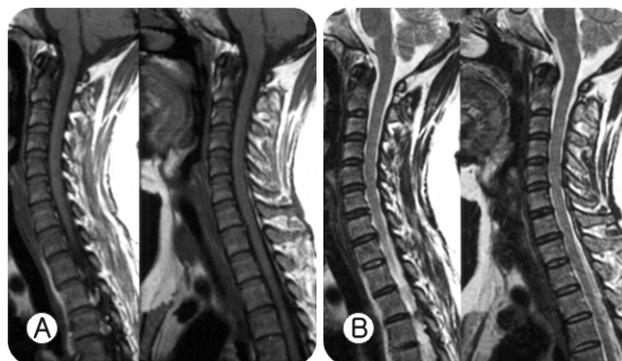
Clubfoot is one of the most common pediatric orthopedic conditions<sup>2)</sup>. It is usually idiopathic or congenital<sup>7)</sup>. Adult-onset clubfoot may occur after a foot drop. Foot drop may result from an upper motor neuron lesion affecting the pyramidal tract, a cord lesion affecting the L5 motor neuron pool, a spinal lesion interfering with L5 outflow, or peripheral lesions affecting the L5 nerve root, lumbosacral trunk, the sciatic nerve peroneal division, or the peroneal nerve<sup>6)</sup>. We observed a case of delayed foot drop after an in-car accident without neural or spinal injuries. She suffered from a psychogenic clubfoot over four years. This article describes such a case, including clinical presentation, management, and reviews some medicolegal issues.



### CASE REPORT

A 41-year-old woman presented with walking difficulty due to the left clubfoot on February 2005. She underwent an in-car

accident in December 2000. She did not lose her consciousness at all. On the day of the accident, she felt well and had no external wounds. So, she went home. One day later, she felt a pain on the neck and back. She was admitted to a local neurosurgical clinic under the impression of cervical and lumbar sprain. Physical therapy and medication were continued for 2 months without any symptomatic improvements. Actually she felt more pain and motor weakness on the left half of the body. She moved to a general hospital in Seoul. Computed tomography of the cervical and lumbar spine revealed no pathological findings. Magnetic resonance imaging (MRI) of the cervical spine showed mild degenerative changes without pathological findings (Fig. 1).



**Fig. 1.** Magnetic resonance imaging of the cervical spine showed stenotic, degenerative changes without evidences of traumatic lesions.

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She was treated by analgesics and physical therapy without improvement. She came back to her city and admitted to an herbal clinic. About 3 months after the accident, insidious foot drop was noticed. It progressed and eventually she could not walk without a brace. She wandered from hospital to hospital without success. An electrophysiological examination was performed on March 2003, about 2 years after the onset of foot drop. Electromyography (EMG) and nerve conduction study were normal. However, the doctor thought the cause of foot drop was result from cervical cord injury, although the electrophysiological studies and MRI were normal. She was certified as a disabled (Grade 3 by Korean Welfare Law for the disabled) on December 2003. She visited a psychiatric clinic for a month around June 2004. The clubfoot persisted. Analgesics and physical therapy were continued without any effects overall more than 4 years. She and her family were suffered from not only the physical symptoms, but also the economical and familial conflicts.

On February 2005, she visited our hospital. Neurological examination showed no pathological findings. There were no signs of an organic lesion. MRI of the cervical spine was normal. EMG was also within normal limit. Clinical psychometric examination revealed relatively low intelligence quotient (IQ 86), unstable emotion, somatic over-sensitivity, aggression and anger. We diagnosed her disease as the psychogenic clubfoot.

On September 2005, we can talk by the phone. Her symptoms persisted. Although we recommended a psychiatric clinic, she did not want to visit there. She said that she underwent another in-car accident. Still she wondered hospitals.



## DISCUSSION

Although Sigmund Freud recognized the potential for musculoskeletal symptoms in hysteric conversion disorder, reports of it in the orthopedic literature have been limited to upper extremity manifestations<sup>1)</sup>. At the beginning of 20<sup>th</sup> century and during World War I, psychogenic contractures were very common; later on they became rare<sup>5)</sup>. Psychogenic clubfoot is rare. We could find a few case reports in the literature<sup>1,3-5)</sup>. Although psychogenic foot drop is more appropriate instead of clubfoot, which is designated as a distinct diagnostic term. Psychogenic foot drop is seldom used. Given its relative rarity, it is a diagnosis that is

easy to miss<sup>1)</sup>. In this case, the patient was suffered from an unexplained clubfoot over four years. She visited many doctors including a neurologist, a psychiatrist, a neurosurgeon, and a few doctors of herbal medicine. Most doctors prescribed analgesics and physical therapy with or without sedatives.

Beside the diagnosis, there are delicate medicolegal issues. If the diagnosis of psychogenic clubfoot was made early, she might receive proper psychiatric management. The result of the treatment will be better and we can save the time and cost for the medical care. Missing the diagnosis may be responsible for the prolonged medical care. Is it possible to claim the doctors who missing the diagnosis? Wrong diagnosis or missed diagnosis may be illegal, when there is an inappropriate negligence. Missing the diagnosis can be a fault. However, it is not illegal in some situations. If the physical examination is done too early in the latent period of the disease, missing the diagnosis is unavoidable for the general doctors. If the patients gave wrong information or didn't cooperate, wrong diagnosis is unavoidable, too. When there was not enough time to get the laboratory data, when the doctor cannot use necessary diagnostic equipments, it is hard to blame doctors. When the disease itself was too rare to notice, when the disease was too hard to differentiate numerous similar disorders, it is hard to claim. Although doctors have responsibilities to do their best, it is too rigorous to claim the rare cases to report on the medical literature.

Another issue is the causal relationship of the psychogenic clubfoot. Although the clubfoot was developed after the in-car accident, it will not occur when there was no psychic background. Both factors are necessary to the psychogenic clubfoot. Delayed diagnosis may be responsible for the prolonged medical care and waste of the time and money. Even though missing the correct diagnosis may not be illegal, doctors may have a civil liability. The accident, the patient's personality, and the doctor's delayed diagnosis, all these three components have their definite own role. Apportionment analysis among them would be a more complex problem.

She had to spend more than 4 years after a trivial accident; she went home at that time without any symptoms. Although she had a personal history with a corresponding problematical psychic background, she was never a malingerer. It is important to recognize that hysteric conversion may present psychogenic

clubfoot. The psychogenic clubfoot should be included in the differential diagnosis of foot drop.



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