## Dose-dependent Hallucinations Due to Baclofen in a Patient with Spastic Cervical Spinal Cord Injury

The Editor,

Sir,

A 26-year old tetraplegic male patient with C8 AIS-D (American impairment scale) lesion was admitted to our clinic for rehabilitation. He had Grade 3 spasticity in his lower limbs according to the Modified Ashworth scale and Grade 1 spasticity in his upper limbs. Although he was able to walk without any assistance, plantar flexor spasticity in his right ankle was limiting his dorsiflexion and was causing a gait disorder. He was given baclofen 10 mg/day for spasticity and the dose increased gradually according to the response. When the baclofen dose reached 70 mg/day, the patient reported visual hallucinations. After the reduction of the baclofen dose to 60 mg/ day, the hallucinations disappeared.

Baclofen is used widely for spasticity, rigidity and clonus in patients with spinal cord injury (SCI) and multiple sclerosis (1). It is a derivative of gamma-aminobutyric acid (GABA), an agonist for the GABA-B receptors and inhibits monosynaptic and polysynaptic spinal reflexes (2). In patients with spinal cord injuries, baclofen has been reported to be particularly helpful in reducing flexor spasms. The usual dose is 60–120 mg divided into three doses per day.

The most frequent adverse effects of baclofen are drowsiness, fatigue, weakness, nausea and dizziness (3). Hallucinations may also occur during baclofen therapy. Fortunately, hallucinations due to baclofen are dose-dependent and may disappear by tapering the dosage as we observed in our patient.

Keywords: Baclofen, hallucinations, spinal cord injury

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## DOI: 10.7727/wimj.2014.191

## REFERENCES

- Hughes C, Howard IM. Spasticity management in multiple sclerosis. Phys Med Rehabil Clin N Am 2013; 24: 593–604.
- Fukuhara K, Katafuchi T, Yoshimura M. Effects of baclofen on mechanical noxious and innocuous transmission in the spinal dorsal horn of the adult rat: in vivo patch- clamp analysis. Eur J Neurosci 2013; 38: 3398–407.
- Simon O, Yelnik AP. Managing spasticity with drugs. Eur J Phys Rehabil Rehabil Med 2010; 46: 401–10.