

# Neurogenic Bladder Developing After Epiduroscopy: A Case Report

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## Article Info

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## Abstract

Low back pain is a common health problem that affects most adults at least one time in their lives, ranks second among the reasons for consulting a doctor, causing loss of labor and lowering the quality of life. We summarize a patient who has neurologic bladder after epiduroscopy.

## Introduction

Low back pain is a common health problem that affects most adults at least one time in their lives, ranks second among the reasons for consulting a doctor, causing loss of labor and lowering the quality of life<sup>1</sup>. Non-surgical interventional procedures can be applied in the treatment of chronic low back pain. Epiduroscopy is a minimally invasive technique for chronic low back pain that can be used for diagnostic or therapeutic purposes<sup>1</sup>.

To draw attention to the fact that, although it is minimally invasive treatment, neurogenic bladder and neurogenic intestine can develop after epiduroscopy. Although rarely occur, we should be careful about complications after epiduroscopy and to make sure patients who do not benefit from conservative methods before recommending epiduroscopy to the harvest.

## Case Report

A 45-year-old female patient referred to physical therapy and medicine department for neurogenic bladder. She has herniated disc on L4-5 and L5-S1 level and she has no benefit from medical and physical therapy. Patient undergo epiduroscopy in algology due to chronic low back pain. After operation she cannot be able to start voiding and has sense deficiency. Then she consulted to the physical medicine and rehabilitation outpatient clinic due to the ongoing neurogenic bladder and bowel. There was no anal tone, no anal sensation. Hyperreflexia bladder was detected. Strengthening exercises, electrical stimulation and magnetic field treatment were planned for the lower extremity and pelvic region. Intestinal habits and feeding recommendations were made. The patient was given training on clean intermittent catheterization. She was directed to the neurosurgery department for neurostimulation (bladder pacemaker).

## Discussion

Epiduroscopy is a minimally invasive technique that allows viewing and processing the epidural space with an optical cable attached to a flexible instrument. It is a method that has been used in recent years and provides a certain improvement in the patient's complaints by

opening the adhesions in the epidural region, especially in cases of operated lumbar disc and lumbar narrow canal. This method is also used in pain related to the disc by seeing the protrude disc accompanied by a laser with the help of an additional apparatus. It provides the opportunity to see the epidural space directly and to see the scars in the spinal canal, the changes in the intervertebral foramens<sup>2,3,4,5</sup>.

The learning process of the enterprise is long. In addition to the necessity of entering the epidural space through the sacral hiatus, the lumbar and sacral epidural areas are small, the bleeding from the epidural veins and the rate of washing with the serum cannot exceed certain ratio, and the inadequacy of the camera field of vision may occur<sup>4</sup>, restlessness was known, and these symptoms subsided in a few days with simple analgesics<sup>5</sup>.

Transient neurological symptoms (headache, hearing problems, paresthesia) are generally associated with the saline rate and regress within hours and days after infusion. Dural injury and associated headache, infection, retinal hemorrhage and visual impairment, encephalopathy, seizure, and neurogenic bladder have been rarely reported<sup>2,3,6</sup>.

In our case, neurogenic bladder developed after epiduroscopy. Upon continuing at 72 hours after the procedure, she was directed to us and started a rehabilitation program for the neurogenic bladder. Urodynamics and EMG were performed, overflow was found to be compatible with the bladder, and clean intermittent catheterization was recommended. Exercises

that strengthen the pelvic floor muscles were performed. The patient's urodynamic findings did not change at the 10th month after the procedure. Due to being a young and active patient, she was referred to the neurosurgery department for neurostimulation (bladder pacemaker).

Epiduroscopy has been shown to be an effective treatment method in patients with chronic low back pain, and reducing pain, as well as improving the overall quality of life and we should be careful about complications<sup>1,7</sup>.

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