

Spontaneous Termination of Spinal Myoclonus after Spinal Anesthesia: A Case Report

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Abstract:

Spinal myoclonus following neuraxial anesthesia is extremely rare. Herein, we report on a case of spinal myoclonus after spinal anesthesia for elective colpocleisis with perineorrhaphy, in a 71-year-old woman. Sudden, brief, repetitive, and rhythmic hyperkinetic movement in both legs developed two hours after spinal injection with hyperbaric bupivacaine; which then spontaneously resolved after 45 minutes without leaving any neurologic deficit.

Keywords: spinal anesthesia, spinal myoclonus, spinal segmental myoclonus

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recent (i.e., less than 1 month) stable vertebral column injury without primary spinal cord injury having undergone surgery under neuraxial anesthesia. None of these patients had neurological adverse events.¹⁰ In this patient, spinal myoclonus appeared unrelated to her old spinal pathology, because it resolved without neurological deficit; additionally, the time course of the symptoms apparently correlated with the local anesthetic effect.

Magnetic resonance imaging of the spine is the investigation of choice to exclude structural lesion of spinal segmental myoclonus². However, it was not requested in this case, because the symptoms were completely resolved. From previous reports of spinal myoclonus after spinal anesthesia results of magnetic resonance imaging of the spine and brain, electroencephalography and electromyography at 48 hours after events, revealed no abnormalities.^{5,7}

Spinal myoclonus after spinal anesthesia can be spontaneously resolved, with most of the reported cases being resolved within a day.³ Anti seizure medications were occasionally required. Although, it was successfully treated by a single dose of intravenous midazolam and sodium valproate^{7,11}, this could have been a result of either medication effect or coincidence of spontaneous termination.¹¹

Lee et al. reported a case of recurrent spinal myoclonus after repeated spinal anesthesia in one year. Although, the long term neurologic complications have not been reported. Spinal anesthesia in a patient with a history of spinal myoclonus should be avoided.⁶

Conclusion

In conclusion, we present a case of spinal myoclonus that occurred following spinal anesthesia with bupivacaine; which is a rare, unpredicted and self-terminating neurological complication.

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Conflict of interest

The authors have no conflicts of interest to declare.

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