AWARD FOR THE HIGHER SCORE DURING THE ABSTRACT REVISION PROCESS FOR CASE REPORTS, 1ST PLACE:

28. PERONEAL NERVE INJURY DUE TO HIP SURGERY LOCATED AT THE KNEE LEVEL: A CASE REPORT

Aleksa Mićić¹, Stefan Radojević¹, Lukas Rasulić².

- ¹ MD up to 2 months after graduation/Clinic for Neurosurgery, University Clinical Centre of Serbia, Belgrade Serbia.
- ² MD, PhD, Full Professor/Faculty of Medicine, University of Belgrade, Belgrade Serbia/Clinic for Neurosurgery, University Clinical Centre of Serbia, Belgrade, Serbia.

https://www.youtube.com/watch?v=0JIMP5Fyl7s&t=28891s

INTRODUCTION: The hip surgery may be complicated with an iatrogenic peroneal nerve injury. The spontaneous recovery of these patients is usually poor, and majority of them require additional surgical treatment. In this paper, we presented a case of iatrogenic peroneal nerve injury following posttraumatic hip surgery, which was decompressed at the knee level, and achieved complete postoperative recovery. THE CASE: A 32-year-old woman was admitted to our department due to EMNG-verified peroneal nerve lesion. Eight months before, the patient was injured in a traffic accident, followed by left hip dislocation and acetabular fracture. After open reduction of the acetabular fracture performed by the orthopedic surgeons, the peroneal nerve palsy followed. At the admission, the clinical findings included left sided incomplete peroneal nerve palsy (MRC=2), pain in the lateral lower leg (VAS=3), and gait disturbances. Using EMNG, the nerve lesion was located at the knee level, while US indicated suspectable nerve compression, due to visible nerve thickening. The PNSQoL and SF-36 scores indicated a significant decline in patients' quality of life (QOL). Following GETA, the external neurolysis, decompression, and complete nerve deliberation were performed at the knee level, with preservation of all nerve branches. The patient reported immediate relief, while completely recovered 8 months following the surgery (MRC = 5, VAS = 0). In order to assess postoperative QOL, a prolonged follow-up is needed. CONCLUSION: The iatrogenic peroneal nerve injury following hip surgery may not always be located in the hip region. We assume that mechanism of in this case injury was nerve compression under the head of fibula due to leg crossing during urgent hip surgery. A proper anamnesis, physical examination, and diagnostic evaluation are necessary for proper treatment of these patients.

Figure. Mean Knowledge Score across Demographic Characteristics.



Key words: Peroneal Nerve Paralysis; Iatrogenic; Neurosurgery.