



Piriformis syndrome after lumbar spinal surgery

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Introduction

Persistent or newly developed sciatica after successful decompression of lumbar lesion is not rare and known as failed

back syndrome. Piriformis syndrome is one common cause of sciatica and could be one of the pathologies of failed back syndrome.

Methods

During March 2010 and June 2016, 157 lumbar spine surgeries were performed in our institution. Piriformis syndrome after lumbar spine surgery was defined as persistent or newly developed sciatica after surgery, sciatic notch tenderness and induced sciatica, and positive Freiberg sign. Fifteen cases were diagnosed as piriformis syndrome.

Results

Successful lumbar decompression or discectomy and absence of distal foraminal entrapment was confirmed with MR neurogram in all cases. No patients showed sciatic notch tenderness or positive Freiberg sign before surgery. Onset of sciatica was from 0 to 100 (ave. 20.9) days after surgery. Symptoms were subsided by pain medication alone in one patient, by combination of pain medication, stretching exercises, and injection of the piriformis syndrome trigger point in 13 patients. One patient required release of the piriformis tendon and sciatic neurolysis. A cause of piriformis syndrome in acute period may be coexistence of lumbar pathology and pelvic entrapment (double crush syndrome). One possible cause of this syndrome in chronic period could be muscle spasm due to change of gait posture.

Conclusions

Piriformis syndrome is not rare after lumbar spinal surgery and sometimes underestimated. In case of persistent or newly developed sciatica after successful decompression of lumbar pathology, diagnosis of piriformis syndrome should be considered.

Learning Objectives

Learn one of the etiology of failed back surgery syndrome