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Case Report

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Interventionist performs a "sham" lumbar microdiscectomy: Should interventionalists be performing spinal surgery?

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ABSTRACT

Background: Neurosurgeons and orthopedists, who have received specific training, should be the ones performing spinal surgery. Here, we present a case in which spinal surgeons secondarily (e.g., 6 months later) found that a patient's first lumbar discectomy, performed by an interventional specialist, had been a "sham" procedure.

Case Description: A 30-year-old male presented with sciatica attributed to a magnetic resonance imaging documented large, extruded disc at the L4-5 level. An interventional pain management specialist (IPMS) performed two epidural steroid injections; these resulted in an exacerbation of his pain. The IPMS then advised the patient that he was a surgeon and performed an "interventional" microdiscectomy. Secondarily, 6 months later, when the patient presented to a spinal neurosurgeon with a progressive cauda equina syndrome, the patient underwent a bilateral laminoforaminotomy and L4-L5 microdiscectomy. Of interest, at surgery, there was no evidence of scarring from the IPMS' prior "microdiscectomy;" it had been a "sham" operation. Following the second surgery, the patient's cauda equina syndrome resolved.

Conclusion: IMPS, who are not trained as spinal surgeons should not be performing spinal surgery/ microdiscectomy.

Keywords: Disc herniation, Interventional pain specialist, Low back pain, Microdiscectomy, Phantom spine surgery, Spine specialists

INTRODUCTION

Some interventional pain management specialists (IMPSs) consider themselves capable of performing minimally invasive spine surgery. Here, we present the case of a patient with a large lumbar disc herniation/extrusion who was "mistreated" by an IMPS with a "sham" minimally invasive microdiscectomy at the L4-L5 level. Six months later, when the patient presented with a cauda equina syndrome, a spinal neurosurgeon performed a bilateral laminoforaminotomy with a L4-L5 microdiscectomy. Interestingly, at surgery, there was no evidence of prior operative scar, confirming that the first surgery was a "sham" procedure. Here, we emphasize that IPMSs, who are not spinal surgeons, should not be performing spinal surgery, and certainly not "sham" spinal operations.

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Figure 1: (a) Axial magnetic resonance imaging (MRI) image showing left paracentral disc extrusion at L4-5 and significant critical central canal stenosis. (b) Sagittal MRI image showing large disc extrusion, L4-5 and severe canal stenosis.

CASE DESCRIPTION

A 30-year-old male presented with the acute onset of severe low back pain and bilateral lower extremity radiculopathy. The magnetic resonance imaging (MRI) showed a large, extruded disc at the L4-5 level. Four orthopedic surgeons had recommended a lumbar discectomy. An IPMS treated him with two epidural steroid injections. The IPMS then stated he was a spine surgeon and then performed a percutaneous microdiscectomy in an outpatient surgical center. Notably, such outpatient centers typically have relaxed standards for vetting/credentialing spinal surgeons, and lower threshold requirements/indications for spine operations performed on their premises. Notably, postoperatively, the patient was told by the IPMS that; "A large portion of the disc had been removed endoscopically, the nerve was freed up, and steroids/morphine were both applied to the surgical field."

Six months later, the patient acutely developed a cauda equina syndrome (e.g., 10/10 pain, left-sided partial foot drop (4/5), and decreased L5-S1 pin appreciation sphincter/ sexual dysfunction, and saddle paresthesias). The MRI again confirmed the large L4-L5 extruded disc herniation contributing to marked thecal sac compression/stenosis seen on the original study [Figure 1]. After consulting a spinal neurosurgeon, he underwent a bilateral L4-L5 laminoforaminotomy/microdiscectomy. Notably, at surgery, they encountered no scarring from the prior IPMS operation, confirming that the first was a "sham" operation. Following the bilateral L4-L5 laminoforaminotomy/microdiscectomy, the patient recovered.

DISCUSSION

There are multiple techniques introduced for decompressing contained disc herniations (e.g., removing a small amount of disc results in dramatic reduction of intradiscal pressure), but many spine surgeons consider these unnecessary procedures.^[1,2] Here, however, the patient had a large L4-L5 extruded disc herniation, a direct contraindication for the IPMS surgeon to even consider a percutaneous microdiscectomy.

This case serves as an excellent example of how only spinal surgeons (neurosurgeons/orthopedists) should be performing spine surgery; this is their training, and they know how to treat the attendant complications. Certainly, these procedures should not be performed by IPMSs who are not trained spinal surgeons.

CONCLUSION

Spinal surgeons (neurosurgeons and orthopedists) should be the ones performing spine surgery, not untrained IPMSs.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

- 1. Buy X, Gangi A. Percutaneous treatment of intervertebral disc herniation. Semin Intervent Radiol 2010;27:148-59.
- 2. Gelalis I, Gkiatas I, Spiliotis A, Papadopoulos D, Pakos E, Vekris M, *et al.* Current concepts in intradiscal percutaneous minimally invasive procedures for chronic low back pain. Asian J Neurosurg 2019;14:657-69.

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