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Lumbar discopathy resolved with microdiscectomy - case report

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Abstract

Low back pain is a widespread medical problem, fortunately most episodes are self limiting and resolve within 6 weeks. Many patients may be treated initially with conservative methods. Persistent sciatic pain or developing neurological deficits corresponding with MR scans pathologies of intervertebral disc (herniation, sequestration) are crucial for surgical qualification. We present patient with acute sciatica caused by disc herniation resolved with lumbar microdiscectomy.

Abstrakt

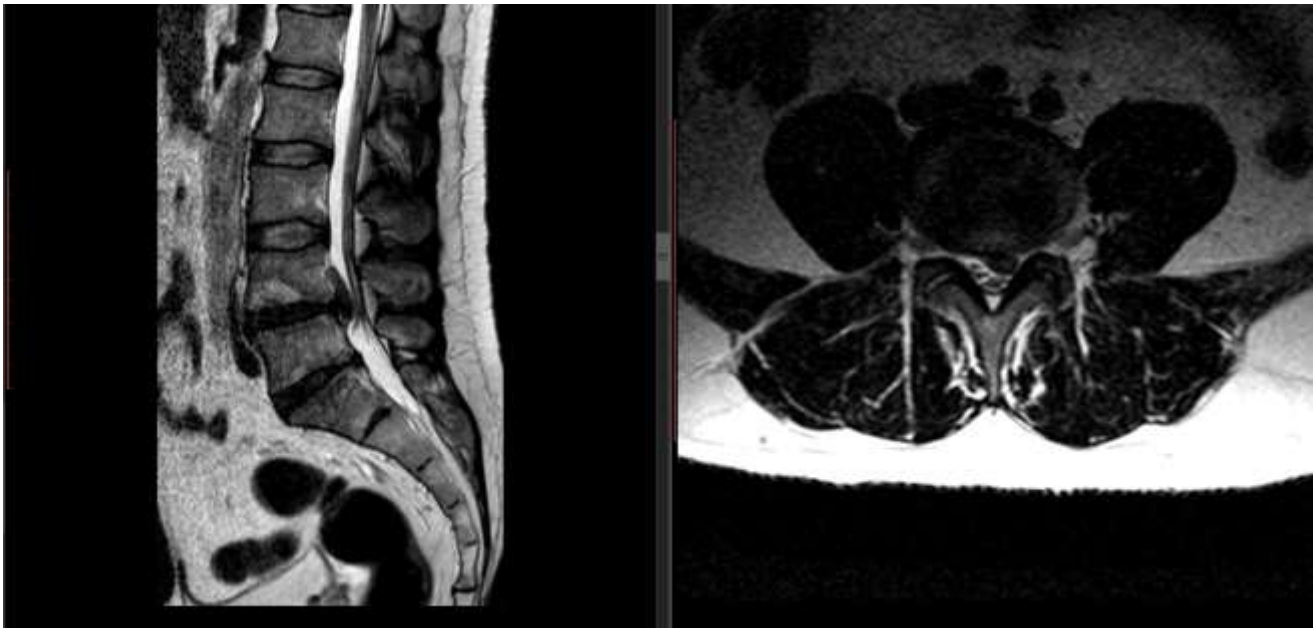
Ból pleców w odcinku lędźwiowo-krzyżowym jest bardzo powszechnym schorzeniem. Większość epizodów bólowych ustępuje samoistnie po 6 tygodniach. Podstawą leczenia jest leczenie zachowawcze obejmujące leczenie farmakologiczne i fizjoterapię. Podstawą kwalifikacji do leczenia operacyjnego jest utrzymujący się mimo leczenia zachowawczego silny ból promieniujący do kończyny jak również postępujące deficyty neurologiczne.

Objawy korespondujące z obrazem MR. Opisujemy przypadek epizodu ostrej rwy kulszowej wywołanej wysunięciem krążka międzykręgowego wymagającej leczenia operacyjnego.

Keywords: lumbar discopathy, microdiscectomy

Case presentation

A 37 year old, obese male with BMI = 26,9 kg/m2 leading non active life style, no story of trauma. He claimed previous back pain maintaining for last 6 months (VAS scale from 2 to 5), incidentally pain radiated to the left buttock and left knee. In the day of hospital admittance in morning hours he tried to lift 40 kg package, severe pain appears in his lower back and radiated to the left leg (VAS evaluation 9-10). In neurological examination at the time of Emergency Ward admittance he presented Laseque symptoms in his left leg above 30 degree. There was a weakened foot dorsiflexion and light disability of the left leg. The pain was radiating on posterior part of his hip to lateral part of calf and lateral ankle. There was no urinary disturbances. Bowel volume was evaluated with ultrasounds. Lumbar spine MRI scans revealed subligamentous prolapse of L4/L5 intervertebral disc filling lateral recesses of spinal canal, compressing left spinal nerve root on this level, indicating foraminal stenosis. [Fig.1].After neurosurgical consultation the patient was qualified for neurosurgical intervention. Microdiscectomy was performed. Prolapsed part of intervertebral disc was gently removed from spinal canal, intervertebral space was revised, some free parts of degenerated disc were removed through broken annulus fibrosus. After surgery the patient greatly improved, pain was relieved, dorsiflexion of left foot also improved. The patient was discharged home. Further observation was performed. Follow up visits after 1 ,6 and 12 months reveal no symptoms of sciatica pain in left leg. Patient claimed regional back pain in area of surgery evaluated in VAS as a 2 out 10.



[Fig.1]

Magnetic resonance scan of the lower spine (T2 weighted). Sagittal image of the lower spine. Note the disc prolapse on level L 4/5. Horizontal image of L4/5. Note the paracentral left-sided disc prolapse.

Discussion

Lower back pain is the one of most common reason for medical attention, second only to respiratory issues with the age of onset 30-50 years. 84% of adults suffer back pain at some point. As a leading cause of work absence in those < 45 years LBP is the most expensive cause of work disability in terms of worker's compensation. Men and women are equally affected. Heavy lifting, twisting, vibration, obesity, poor conditioning are most common risk factors of LBP. Most episodes are self-limited and do not require medical intervention. Almost any structure in the back can cause pain, including ligaments, joints, periosteum, musculature, blood vessels, annulus fibrosus and nerves.

Lumbar Disc Herniation (LDH) becomes the most common reason of neurosurgical consultation in a spinal surgery zone. LDH could manifest as a regional pain and also radiate to lower limbs as a sciatic pain. Conservative treatment resolves most of LBP. Persistent sciatic pain corresponding with MR scans pathologies of intervertebral disc (herniation, sequestration) are crucial for surgical qualification. Microdiscectomy is the most commonly performed on L4/L5 and L5/S1 level, urgent procedure is reserved for patient with progressive deficities and cauda equina syndrome.[1,2,3,4,5]

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