



SPINE SURGERY; REVISION OF SPINE SURGERY AFTER SIMPLE LUMBER DISCECTOMY

Muhammad Khalid¹, Muhammad Asad Qurashi², Wasim Afzal³

1. MBBS, MS (Neurosurgery)
Fellowship in Spine Surgery
Senior Registrar of Spine Unit
CMH, Rawalpindi
2. MBBS, FCPS (Ortho)
Fellowship in Spine Surgery
Professor & HOD of Spine Unit
CMH, Rawalpindi
3. MBBS, FCPS (Ortho)
Fellowship in Spine Surgery
Assistant Professor of Spine Unit
CMH, Rawalpindi

Correspondence Address:

Dr. Muhammad Khalid
Fellowship in Spine Surgery
Senior Registrar of Spine Unit
CMH, Rawalpindi
drkhalid86@yahoo.com

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ABSTRACT... Introduction: low back pain is basic medical issue in our general population, it influence our day by day life exercises and bargains our personal satisfaction. Intervertebral disc herniation is one of the commonest reasons for backache and sciatica. Discectomy is the essential treatment of decision for disc herniation. **Objective:** To determine the incidence and indication of revision spine surgery after lumbar discectomy. **Study Design:** Retrospective study. **Setting:** Spine Surgery Unit of Central Military Hospital Rawalpindi. **Period:** Ten years from July 2007 to August 2017. **Methods:** Patients who presented with disc herniation for which discectomy was done were included into this retrospective study. Patient's statistic profile, indications, signs and imaging finding were recorded. Discectomy was performed through one-sided Fenestration at symptomatic side. Post-operative patient's changes was noted and recorded. Three hundred and fifty two patients were contemplated amid most recent ten years. **Results:** out of 352 patients, 214 were male 138 were female patients; age ranged from 20 to 70 years. 74(21.02 %) patients out of 352 again presented with severe backache and sciatica, recurrent disc herniation was confirmed on MRI lumbosacral. 46 (62.16%) out of 74 patients were complaining of backache than sciatica, backache more severe on activity and relieved on rest. 28(37.83%) out of 74 patients had sciatica than backache. TLIF was done in 46 patients and remaining 28 patients treated with laminectomy and discectomy. Back pain and sciatica was relieved in all patients (100%) after TLIF and discectomy and quality of life improved. **Conclusion:** Our study concluded that incidence of spine surgery revision is 21% and indication of surgery is either stability or recurrence of disc herniation. TLIF is having good result in patient with stability issue and discectomy in patients' with sciatica than backache.

Key words: Disc disease, lumbar discectomy, Revision of spine surgery

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INTRODUCTION

Acute backache is a common health problem in the society now days.¹ Backache is a standout amongst the most well-known medical issues and makes a considerable individual, group, and money related weight globally.²

The most recent overall overview of the inescapability of backache in the adult general open was appropriated in 2000 and exhibited point transcendence of 12– 33% and 1-year normality of 22– 65%.³ Usually, the prospect that the etiology of 80% to 90% of LBP cases is dark has been managed transversely finished decades.⁴ Basically, any spinal structure can fill in as the wellspring of LBP in impacted patients gave the structure: 1) is innervated; 2) is fit for

causing pain like that accomplished clinically; and 3) is helpless to malady or damage known to be excruciating. Investigators.^{5,6} The wellsprings of LBP and starting predominance gauges for excruciating lumbar intervertebral circles (IDD), symptomatic facet joint pain (FJP), and sacroiliac joint torment (SIJP).^{6,7}

Degenerative disc disease in the lumbar spine, or lower back, insinuates a confusion in which an affected disc causes low back agony.

The honest to goodness reason is likely multi factorial. It could be from clear wear and tear, or may have a horrible reason like RTA. In any case, it occasionally starts from straightforward damage, for instance, street car crash. It is no

doubt a direct result of low imperativeness harm to the Disk that advances with time.⁸

The disc itself does not have a blood supply, so if it oversees harm it can't repair itself the way extraordinary tissues in the body can. For the most part insignificant harm to the disc can start a degenerative course whereby the plate wrecks. Despite its to some degree enthusiastic stamp, degenerative disc disease (DDD) is truly typical, and it is surveyed that no under 30% of people developed 30-50 years old will have some level of disc degeneration.⁹

The most patients with lumber disc disease encounters low back pain, radiation to legs, numbness and shortcoming specifically dermatomes.¹⁰

Finding of lumber disc disease is made premise on history, examination and affirmed by MRI scan.¹¹

Disc disease is treated with conservative treatment and movement adjustment first. Surgery is shown for intractable pain, or dynamic Neurodeficit.¹²

Complications of disc surgery are coincidental duratomy and infection, repeat disc herniation and instability.¹³

The aims of current study are to determine the incidence and indication of revision spine surgery after lumber discectomy.

METHODS AND MATERIAL

This retrospective study was led in the spine surgery unit of Central military hospital Rawalpindi over a time of ten years from July 2007 to August 2017. Patients gave disc herniation for which primary discectomy was done, were incorporated into this study. Patient's statistic profile, manifestations, signs and imaging

finding were recorded. All patient history taken and examination was done then MRI lumb sacral spine, plain X-beam was performed. After determination as an intervertebral disc herniation, Discectomy was performed through one-sided Fenestration at symptomatic side. After surgery patient's improvement changes was noted and recorded. Three hundred and fifty two patients were considered in this investigation amid most recent ten years. Patients' ages over 70 OR underneath 20 and patients related with co morbid were excluded.

Fenestration and discectomy: fenestration is window or opening made in lamina bone and ligamentum flavum, discectomy is expulsion of herniated disc.

Recurrent disc herniation: disc prolapse at same level following a half year.

Transformational amble intervertebral combination (TLIF): This is the technique which requirement for stability in instable spine.

Spine insecurity: unnatural development and intemperate movement of vertebral bodies inside the lumbar spine in connection to each other is viewed as lumbar spine instability.

RESULTS

In the current study, Out of 352 patients, 214 were male 138 were female patients; age ranged from 20 to 70 years.

74(21.02 %) patients out of 352 again presented with severe backache and sciatica, recurrent disc herniation was confirmed on MRI lumbosacral.

46 (62.16%) out of 74 patients were complaining of backache than sciatica, backache more severe on activity and relieved on rest. 28(37.83%) out of 74 patients had sciatica than backache.

Total patients	Recurrent disc herniation	Presentation	Laminectomy	TLIF	Complications
352	74	Backache and sciatica	28	46	Duratomy (6patients) infection, (4patients)

TLIF was done in 46 patients and remaining 28 patients treated with laminectomy and discectomy.

Back pain and sciatica was relieved in all patients (100%) after TLIF and discectomy and quality of life improved.

DISCUSSION

The wellsprings of LBP and introductory commonness gauges for painful lumbar intervertebral circles (IDD), symptomatic facet joint pain (FJP), and sacroiliac joint pain (SIJP).^{6,7}

The reason is likely multi factorial. It could be from clear wear and tear, or may have a horrible reason. Regardless, it infrequently begins from essential harm, for example, road auto collision. It is point of fact because of low basics damage to the Disk that advances with time.⁸

The disc herniation has been spoken to sway from 3-20%. Ipsilateral herniations at a formerly worked level are the commonest kind of repeats (6-8%)⁹ and we have included as of late these in the remedy amass since we should need to feature the utility of a practically identical procedure for discectomy for both essential surgery and changing in surgery through the scarred tissue. The solidification of contralateral herniations and repeat at a substitute level would induce that the surgery was done through virgin tissue. The repeat of ipsilateral repeats among the essential lumbar discectomies done in our foundation was nine out of 259 (3.5%).

Cinotti et al.⁵ and Suk et al.,⁶ have hypothesized that the annular cut of the primary surgery makes the worked plate all the more unprotected, particularly under states of mechanical stacking and this is likely why rehash is more ordinary in more vigorous men. Seventy-five for each penny of the change gather in our game-plan in like way had an establishment set apart by standard smoking.

The trademark history of lumbar disc herniation may accept a section in the kind of plate experienced in surgical game plan. Our survey

examination of 273 surgical cases had an immense bigger piece of removed and sequestered plate - 80% in the primary surgery gathering and 78.6% in the refresh gathering. Given the convictions that most disc herniations resorb after some time, that greater and uncontained (removed and sequestered) herniations tend to backslide to a more imperative extent^{11,13} and that our own particular is a tertiary referral recuperating office (most patients don't come to us toward the start of symptoms), we induce that three months of non-operator treatment is apparently not agreeable for assurance of signs, even in ousted and sequestered plate. This is restricting to the proposals in the literature.^{7,12} There are two possible clarifications behind the more vital number of herniated and sequestered disc in our plan; they may have had more powerful symptoms requiring surgical treatment and perhaps we have an inclination to deferring non-agent treatment for contained plate.

Clinical outcomes in primary disc surgeries have generally known to be extraordinary however the same isn't the circumstance with revised disc surgeries.^{2,10,14} In the present course of action, 78.6% of the redress group had "appealing" results, which is proportional with occurs portrayed in the literature.^{5,6,14} This legitimises our thinking of using the same lumbar discectomy philosophy in the organization of refresh disc surgeries rather than a more wide strategy.

The many-sided quality rates with our procedure of lumbar discectomy are same with those depicted in the literature.^{2,15} Our bothers amidst changed surgery than those achieved amidst primary surgery (9.65%) and however this is endorsed in the literature,^{2,8,16}

The present study has its inborn constraints: it is a review contemplate in view of case records and imaging thinks about; numbers in the correction gather are not sufficiently huge to be contrasted measurably and the primary surgery gathering; longer follow-up is required to give more understanding into the after effects of revision surgery.

CONCLUSION

Our study concluded that incidence of spine surgery revision is 21 % and indication of surgery is either stability or recurrence of disc herniation. TLIF is having good result in patient with stability issue and discectomy in patients’ with sciatica than backache.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Muhammad Khalid	Write-up of manuscript, Operating surgeon.	
2	M. Asad Qurashi	Write-up of manuscript, Operating surgeon.	
3	Wasim Afzal	Team members in patient management, Operating surgeon and write-up of manuscript.	