

*Research Article***Surgical management of failed back surgery syndrome****Medhat M. EL-Sawy, Waleed Z. Nanous and Ali A. Abdelrahman**

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Abstract

Introduction: Failed back surgery syndrome (FBSS) is a term used to define an unsatisfactory outcome of a patient who underwent spinal surgery irrespective of type or intervention area with persistent pain in the lumbosacral region with or without it radiating to the leg (Borondi et al., 2016). **Aim of the work:** How to surgically manage different causes of failed back surgery syndrome. **Patients and Methods:** The study was performed at the Department of Neurosurgery of El Minia university Hospital from June 2017. **Results:** According to our study that performed on 20 patient of failed back syndrome who underwent surgical intervention in our department from June (2017) till July (2018) the following are the results: **Keywords: CBC:** Complete blood count, **HB:** Hemoglobin, **TNF:** Tumor necrosis factor.

Introduction

Failed back surgery syndrome (FBSS) is a term used to define an unsatisfactory outcome of a patient who underwent spinal surgery irrespective of type or intervention area with persistent pain in the lumbosacral region with or without it radiating to the leg (Borondi et al., 2016)

This syndrome can be categorized as follows: mistaken diagnosis, Trans operative error, technique error, poor application, poor indication. (LM Rosales-Olivares et al., 2007).

CT, MRI and nuclear medicine have critical diagnostic roles in evaluation of failed back surgery syndrome characterized by symptomatic new or recurrent disc herniation, peri-/epidural fibrosis, arachnoid-ditis and radiculitis (A Malhotra et al., 2015)

The treatment of failed back surgery syndrome (FBSS) can be equally challenging to surgeons, pain specialists, and primary care providers alike. Multidisciplinary approach is preferred. This includes pharmacological management of pain, physical therapy, behavioral modification and may include therapeutic procedures such as injections, radiofrequency ablation, and lysis of adhesions, spinal cord stimulation, and even reoperations. (Baber et al., 2016)

Aim of the work

How to surgically manage different causes of failed back surgery syndrome .

Patients and Methods

The study was performed at the Department of Neurosurgery of El Minia university Hospital from June 2017.

Inclusion criteria:-

- Patients with recurrent prolapsed intervertebral disc
- Patients with post-operative spondylodiscitis.
- Patients with postoperative instability
- Patients with adjacent segment and/or new level prolapsed disc.
- Patients with persistent pain with failed medical treatment and physiotherapy

Exclusion criteria:-

- Patients who are unfit for operation.
- Patients who are improved on medical treatment.
- Patients who refuse the operation.

A total of 20 patients were identified (12 male and 8 female). They had an age range between 30-60years with back pain post lumbar operation and all the patients passed through the following sheet:

Results

According to our study that performed on 20

patient of failed back syndrome who underwent surgical intervention in our department from June (2017) till July (2018) the following are the results:

The 20 patients include (13 patients with recurrent PID& 5 patients with postoperative

spondylolithesis and 2 patients with postoperative spondylodiscitis).

The following table and diagram showing the (age & gender and classification) including all patients

Table

Variable	N (%)
Age	
Range	25-58
mean±sd	39.75±10.518
Gender	
• Male	12(60%)
• Female	8(40%)
Classification	
• postoperative spondylodiscitis	2(10%)
• postoperative spondylolithesis	5(25%)
• recurrent PID	13(65%)
Total	20(100%)

Discussion

Lumbar disc prolapse is a common problem encountered in neurosurgical practice; it produces profound changes in lifestyle of the individual and family (Ackerman SJ, Steinberg EP et al., 2013)

The lumbar discs most often affected by degeneration and subsequent herniation are L4-L5 and L5-S1, probably due to combination of longstanding degeneration and a subsequent change in ability of the disc to resist applied stress, in addition to the decreased motion of the upper lumbar spine which leads to spondylosis (Micheal D, Martin MD et al., 2012)

Most cases involve freely extruded disc into the spinal canal, occupying more than one third of the canal diameter. The associated spine pathology can limit the canal diameter, predisposing the patient to severe symptoms with smaller disc Herniation. (Firoozia H, Kricheff II et al., 2014)

Symptoms of lumbar disc disease are either due to herniation of the nucleus pulposus through the mechanically weak annulus

fibrosus or from tearing of the annulus itself. This can lead to radiculopathy from nerve root compression or an inflammatory process affecting the nerve roots (Micheal D, Martin MD et al., 2012)

Recommendations

- 1- Provide the lumbar spine patients postoperatively with information about the causes of failure of their operations and their management to increase their awareness about the risk factors and causes of the recurrence and healthy life styles through the dissemination of mass media such as antismoking media, well balanced diet regime, proper control of diabetes mellitus, continues follow up system, and other health promotion programs.
- 2- Apply protocols for proper and rapid control and management of post-operative wound infections especially in diabetic patients.
- 3- Any patient with recurrent PID with persistent back pain and – or sciatica despite of medical treatment should underwent adhesolysis and revision discectomy.

- 4- Any patient with postoperative spondylolithesis with persistent back pain and claudication pain despite of conservative treatment should undergo adhesolysis, foraminotomy and fixation.
- 5- Any patient with postoperative spondylodiscitis with persistent back pain despite of conservative treatment should undergo debridement with or without fixation.

References

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