P71 - OUTCOME OF A MULTIDISCIPLINARY REHABILITATION PROTOCOL FOR FAILED BACK SURGERY SYNDROME

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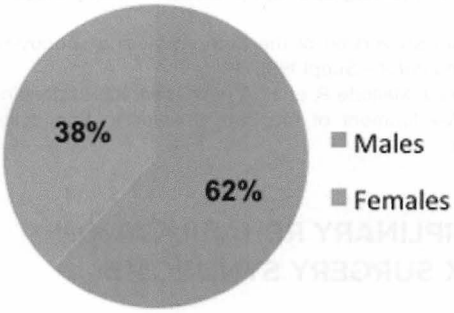
Introduction: Failed back surgery syndrome (FBSS) is defined as a group of conditions that causes persistent or recurring low back pain, with or without sciatica following one or more spine surgeries. FBSS is a generalised term to describe the patient's condition post spine surgery with unsuccessful result as the patient continues to feel pain on the back or on the legs for more than a year. Surgical interventions for low back pain (LBP) are on the rise, but even after the surgery, a significant number of individuals with LBP continue to remain symptomatic. It is reported that about 53% of all L5-S1 disc surgeries fail to produce relief of symptoms. In such cases, the patient often ends up in worse condition than before the operation. Non-surgical rehabilitation is the preferred approach after a failed back surgery syndrome (FBSS).
Many factors are responsible for FBSS like surgery related factors (technique, recurrent disc herniations, neuropathic pain with fibrosis), age, lifestyle (smoking, alcohol, lack of physical fitness), psychological factors (anxiety, depression, sleeplessness) and other patient related factors. It has been estimated that after any spinal surgery, nearly 20% of the patients will require secondary surgery due to persistence of pain or for complications due to surgery. After secondary surgery, the success rate has been noted to reduce by 30%, and after the third surgery by 15% and 5% by the end of fourth surgery.

Aim: There is a paucity of studies which have focused on the outcome of a sequenced rehabilitation protocol following FBSS. Hence, the aim of the study was to study the effectiveness of a sequenced, multidisciplinary rehabilitation protocol for FBSS.

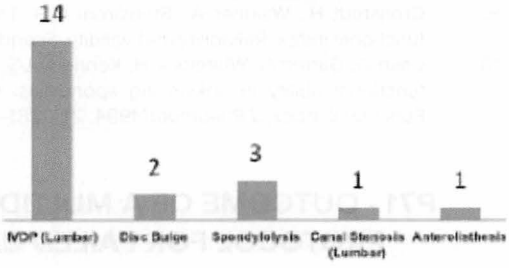
Methodology: Study design and population: A retrospective analysis of 21 subjects with FBSS. **Study setting:** All the subjects received treatment at a tertiary level rehabilitation centre. **Selection criteria:** All the subjects were evaluated and diagnosed by a single orthopedic and rehabilitation specialist who headed the multidisciplinary team. All the 21 subjects had complaints of pain in the lower back which was radiating to one on both the lower extremities. **Intervention:** All the 21 subjects were treated with a sequenced rehabilitation protocol by a multidisciplinary team involving physiotherapist, psychologist, yoga therapist and dietician in a sequenced protocol for a period of 4 to 8 weeks. The treatment included sensory desensitisation, soft tissue and myofascial mobilisation, taping, relaxation training, mind body approaches, exercises and yoga. **Outcome measure:** The primary outcomes used were Visual Analog Scale (VAS) to measure pain intensity and Oswestry back disability index (OBDI) to measure the functional level. Measurements were taken before and after the treatment and follow up was done 6 months later.

Results: The participants were between the ages of 22 to 78 years. The performed surgeries were discectomy (80.95%), laminectomy (23.8%) and spinal fusion (14.28%). Surgeries were done at the following levels: L5,S1 (n=9), L4,L5 (n=12), L2,L3 (n=1) and L3,L4 (n=2). 3 subjects were operated at more than one level. One subject had undergone a revision surgery on 2 occasions. All the subjects were diagnosed to have Myofascial Pain Syndrome (MPS) of the lower back with Neuropathic Pain. Other co-morbidities included Fibromyalgia (n=6), Osteoporosis (n=3), Rheumatoid Arthritis (n=2), Seronegative Arthritis (n=2) and Hypothyroidism (n=2), which were treated with medicines. Significant decrease in the pain level: VAS ($p<0.01$) and increase in functional status: OBDI ($p<0.01$) was noted in all the subjects following a sequenced rehabilitation protocol.

Graph 1: Gender Distribution



Graph 2: Preoperative Indications for Back Surgery



Conclusion(s): FBSS might be caused by several identifiable causes related to the initial surgery, including poor patient selection, misdiagnosis, mismatch of the procedure with patient pathology, technical errors, etc. This study concluded that treatment of failed back surgery syndrome by a sequenced multidisciplinary protocol was an effective method to decrease pain and attain functional improvement.

Keywords: Failed Back Surgery Syndrome, Manual Therapy, Myofascial Pain Syndrome

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