

# Physical Barrier to prevent Clinical symptoms due to Scarr tissue after Disc surgery

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#### Introduction

A prospective randomised 2-year follow-up study on patients undergoing lumbar disc herniation surgery. The objective was to investigate the relationship between peridural scarring and clinical outcome.

### **Methods**

100 patients whose mean age was 39 years (18-66);(50%) were perioperatively randomised to receive a new antifibrotic Barrier ( Chitosan), and 100 served as controls. All patients underwent MRI at 3 and 9 months postoperatively, and an independent radiologist graded the size, location and development of the scar, by using a previously described scoring system. Pre- and 1-year postoperatively patients graded their leg pain on a visual analogue scale (VAS)1 + Discapacity pain scale (2) at 1.3.6 months.

At the 1-year follow-up patients rated their satisfaction with treatment (subjective outcome) and were evaluated by an independent neurologist (objective outcome) Patients treated with Chitosan did not demonstrate any adverse effects,

#### **Results**

The Ch Group Postsurgical fibrosis was found in 2.% vs 6 % Standard Gr

Pain Outcomes: Results from the Control Group (Standard Practice)

Patients with more fibrosis, shown by the arrows, exhibited more significant symptoms . The results showed that the probability of recurrent pain increases when scar score increases. Patients having extensive peridural scar were 3.2 times more likely to experience recurrent radicular pain than those patients with less extensive peridural scarring. I

Mean post operative pain scores for the Ch Group were lower at all time points and statistically lower at 3 to 6 months.

The difference in re-operation rate between the collagen matrix group and the standard procedure group is statistically significant (p<0.001).

#### **Conclusions**

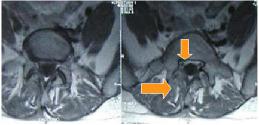
The use of CH resulted in statistically significant surgical outcomes 2 % vs 6 %

None of the 100 patients from the Ch Group required re-operation due to clinical symptoms

Ch Group:

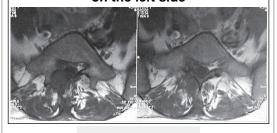
Was easy to use over the exposed tissues (thecal sack and nerve root)

# Scarr tissue after disc surgery



See orange arrows

## scarr tissue over Right side. Free Root on the left side

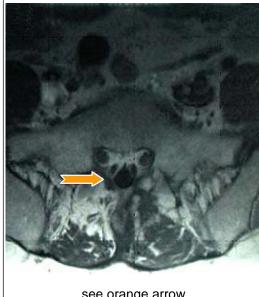




## **Learning Objectives**

Avoid symptoms with physical Barrier due to scarr tissue

# Phisical barrier. No scarr tissue



see orange arrow