

Epidural Fibrosis

TERMINOLOGY (SYNONYMS)

- Peridural fibrosis
- Scar tissue
- Spinal adhesions

INTRODUCTION

Epidural fibrosis refers to the formation of scar tissue within the epidural space of the spinal canal. This is often related to back surgery. Scarring (fibrosis) is part of a normal repair process after tissue becomes injured whether the result of surgery or other causes. If too much scar tissue develops or if it does not breakdown it can lead to a painful condition. The extent of fibrosis is usually related to the extent of injury or in the case of surgery to the extent of surgical dissection and bleeding. Fibrosis can compress, irritate and result in abnormal traction on spinal nerve roots. Fibrosis can compromise blood flow to vital structures including the spinal nerve roots.

The presence of fibrosis is not always limited to the epidural space of the spinal canal. It can also develop within a spinal nerve thus compromise the function of the individual nerve fibers within the spinal nerve (nerve root). This creates a significant diagnostic and treatment challenge. This is referred to as intradural fibrosis. It can not successfully be treated with surgical decompression.

Epidural fibrosis refers to scar tissue which forms over the coverings of the spinal cord and nerve roots. Scar tissue may contribute to chronic inflammation as well as chronic pain. Failed back syndrome is sometimes been associated with excessive epidural fibrosis. Fibrosis can adhere or fix a nerve within the central spinal canal and/or neuroforamen rendering it unable to move out of the way from a mass effect such as disc herniation.

PREVALENCE

As many as one fourth of individuals who develop persistent back pain after surgery are found to have significant epidural scar (fibrosis). The presence of peridural (epidural) fibrosis is implicated in approximately 3-10% of cases of failed back syndrome (FBS) after spine surgery. The presence of fibrosis is not always associated with symptoms.

Epidural fibrosis occurs more often in adults and with equal prevalence in males and females.