# **KISSING SPINE**

Kissing spine is also known as Baastrup's disease or interspinous bursitis. This syndrome was first diagnosed by Baastrup in 1933. Baastrup Syndrome or Kissing Spine Syndrome is a relatively common medical condition of the vertebral column and it is characterized by degenerative changes of both the spinous processes and interspinous soft tissues of two adjacent vertebra. In which the spinous processes of the two adjacent vertebrae come in contact with each other resulting in back pain. This is most common in the lumbar spine with L4-L5 being the most frequently affected level but in rare cases, it occurs in the cervical spine.

## **CAUSES:**

The cause of the back pain resulting from Baastrup Syndrome or Kissing Spine Syndrome is mainly mechanical as a result of the adjacent spinous processes coming in contact with each other.

Suggested risk factors are:

- Excessive lordosis which results in increased mechanical pressure
- Abdominal Obesity
- Repetitive strains of the interspinous ligament with subsequent degeneration and collapse
- Incorrect posture
- Traumatic injuries

## **SYMPTOMS:**

- Excessive lordosis, this results in mechanical pressure that can cause pain and repetitive strains combined with subsequent degeneration and collapse.
- Spinous process pain, which may or may not be referred. The L4-L5 level is generally the area which is mostly affected.
- Back pain, more specifically, midline pain that radiates distally and proximally, increasing on extension and reducing on flexion.

## **DIAGNOSIS:**

Baastrup Syndrome cannot be diagnosed by simply assessing the lumbar spine, imaging modalities are required to prevent misdiagnosis.

**X-ray** may show the spinous processes making contact, but **CT scans** will better illuminate degenerative changes (eg, a herniated disc) caused by the disorder. However, **MRI** is best to highlight areas of degeneration involving the soft tissues of the spine and can detect kissing spine in its earliest onset.

**MEDICAL MANAGEMENT:** The main goal of any therapy is to reduce the lower back pain as well as a return to normal ADLs.

### **Conservative treatment:**

- localised injections of analgesics or NSAIDs. During this treatment period, extension movements of the lumbar spine should be avoided.
- Injections of steroid and local anesthetics into the interspinous ligaments are given to reduce the pain.

# **Surgical treatment:**

It includes excision of the bursa, partial or total removal of the spinous process or an osteotomy. Average hospital stay is up to 31 days, however, such therapies occasionally have unsatisfactory outcomes but it has been reported that numerous patients have developed pain post-surgery.

## PHYSIOTHERAPY MANAGEMENT:

- The main goal is the reduction of pain as well as hyperlordosis and to improve spinal function. Once the pain is managed, physical therapy management can begin, involving education, strengthening and stretching of the abdominal and spinal muscles.
- Hyperlordosis can be treated by strengthening of the trunk muscles along with postural education and hip flexor stretches.
- Other treatments such as heat therapy and muscle relaxation techniques can be helpful.

#### References:

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- 2. Filippiadis D.K. et al., Baastrup's disease (kissing spines syndrome): a pictorial review, Springer, 2015, 6(1): 123–128
- 3. Lamer T.J. et al., Fluoroscopically-Guided Injections to Treat "Kissing Spine" Disease, Pain Physician, 2008; 11: 549-554
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