

ADVANCED MEDICINE

LECTURE SEVEN : DISORDER OF SPIN AND SPINAL CORD

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قسم تقنيات التخدير

Fourth Stage

المرحلة الرابعة

Lecture nine

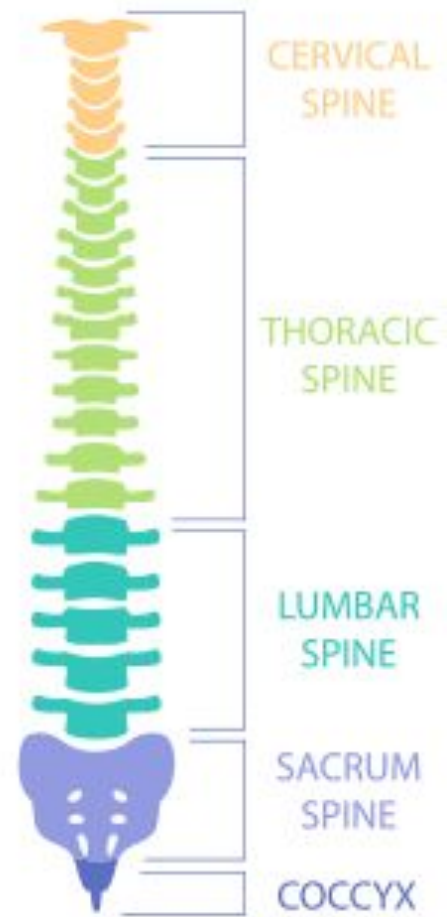
Theoretical

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The spine is the backbone of the human body, providing structural support, mobility, and protection to the spinal cord. However, due to various factors like aging, lifestyle habits, and injuries, people often suffer from spine disorders that can impact daily life. These conditions range from mild discomfort to severe, debilitating pain that affects movement and quality of life





Causes of Spine Disorders

Understanding the causes of spine disorders can help in prevention and early intervention:



Aging: Natural wear and tear weaken spinal structures.

Poor Posture: Long hours of sitting, incorrect lifting techniques.

Injuries: Accidents, falls, and sports-related trauma.

Obesity: Extra weight puts pressure on the spine.

Genetics: Some conditions run in families.

Lack of Exercise: Weak muscles provide less support to the spine.

Symptoms of Spine Disorders

Common signs indicating a spine-related disorder include:

- 1. Chronic back or neck pain**
- 2. Numbness, tingling, or weakness in the limbs**
- 3. Difficulty walking or maintaining balance**
- 4. Limited range of motion**
- 5. Deformities in spine alignment**

Diagnosis of Spine Disorders

To accurately diagnose spine disorders, doctors may use:

Physical Examination: Checking posture, flexibility, and pain areas.

X-rays & MRI: Imaging tests to assess structural damage.

CT Scans: Detailed cross-sectional images of the spine.

Electromyography (EMG): Evaluates nerve function.

Common Spine Disorders

- 1. Herniated Disc (Slipped Disc)**
- 2. Degenerative Disc Disease (DDD)**
- 3. Spinal Stenosis**
- 4. Scoliosis**
- 5. Osteoarthritis of the Spine**
- 6. Sciatica**
- 7. Kyphosis & Lordosis**

1. Non-Surgical Treatments

For many spine related disorders, non-invasive treatments can help:

Medications: Pain relievers, anti-inflammatory drugs, muscle relaxants.

Physical Therapy: Strengthening exercises, stretching routines.

Posture Correction: Ergonomic adjustments for daily activities.

Chiropractic Care: Manual spinal adjustments.

Pain Management: Nerve blocks, steroid injections.

2. Surgical Treatments

When conservative treatments fail, surgery may be necessary:

Spinal Fusion: Joins two or more vertebrae to stabilize the spine.

Discectomy & Laminectomy: Removes damaged discs or bone spurs.

Artificial Disc Replacement: Replaces a damaged disc with an artificial one.

Minimally Invasive Spine Surgery: Smaller incisions, faster recovery.

Posture

Reasons



NO ACTIVITY



BAG ON
ONE SHOULDER



FOOTWEAR
SHOES



LIFTING
OF HEAVY



GENETIC
PREDISPOSITION



INCORRECT
WORKPLACE



Posture disorders



normal



lordosis



scoliosis



kyphosis

Treatment



HEALTHY DIET



RIGHT MATTRESS



BACKPACK



PHYSICAL EXERCISE



CORRECT
WORKPLACE



WALKS IN
THE OPEN AIR

Preventing Spine Disorders

Prevention is key to maintaining a healthy spine:

1. **Practice Good Posture:** Keep your back straight while sitting or standing.
2. **Exercise Regularly:** Strengthen core muscles to support the spine.
3. **Maintain a Healthy Weight:** Reduces strain on the spine.
4. **Lift Properly:** Use your legs, not your back.
5. **Take Breaks from Sitting:** Avoid prolonged sitting with regular stretching.

QUIZ



What is the causes of spin disorder ?

Any questions?

*Thank
You*