

Understanding Lumbar Spondylosis: A Case Study on Diagnosis, Management, and Nursing Care

Jaspin Femila R.

Bethlehem college of nursing, Karenga, Kanniyakumari dist. Tamil Nadu, India

Abstract: Lumbar spondylosis is a age - related condition that occurs when the vertebrae and disc of the lower back degenerate. This paper presents a case study focusing on the clinical manifestation, Diagnosis, management and nursing care of 42 - year women with Lumbar Spondylosis. Lumbar spondylosis is especially common in people older than 40 years. Patients typically report their first symptoms between the ages of 20 and 50 years. According to the arthritis foundation, spondylosis affects about 75% of individuals over the age of 60years. Diagnosis often involves imaging techniques. Management option ranges from medical intervention. Nursing care focus on physical therapy, Heat or cold therapy, modification of lifestyle changes, and emotional support.

Keywords: Lumbar Spondylosis, degenerate, Arthritis, Vertebrae

1. Introduction

Lumbar spondylosis is a common condition that occurs when the vertebrae and disk in the lower back degenerate due to aging. As peoples age, the disk between the vertebrae stiffens and break down and the bones wear down and can grow bone spurs. Other factors that can contribute to lumbar spondylosis include overweight, having a job that involves sitting for long periods, or having repeated injuries to the lower back.

a) Causes:

- Aging
- Trauma
- Obesity
- Prolonged sitting

b) Diagnosis:

- Physical exam
- X - ray
- MRI
- CT scan

c) Complications

- Spinal nerve damage
- Limited mobility
- Paralysis

2. Case study of Mrs. x

A 37 yrs old female patient was admitted in the hospital with the complaints of back pain and numbness in the neck and hands. After a detailed investigations and Imaging techniques she was diagnosed as lumbar spondylosis. She was found to be conscious and oriented.

Her vital signs as follows:

Temperature: 98.6°F

Pulse: 82beats/min

Respiration: 22breath/min

Blood pressure: 120/80mmHg

2.1 Investigations

- The CT scan report was received.

- Ligamentum flavum hypertrophy noted at multiple levels of dorsal spine.
- Posterior disc bulge at L4 - L5 causing mild anterior thecal sac indentation.
- Lumbar spondylosis noted.

2.2 Lab reports

- Hemoglobin: 13gm/dl
- Platelet count: 2.42 lakhs/cumm

2.3 Signs and Symptoms

Book Picture	Patient Picture
Back pain	Present
Stiffness	Absent
Numbness	Present
Tingling	Absent
Muscle Weakness	Present
Pain in the neck, buttocks and legs	Present



2.4 Management

- Most people with lumbar spondylosis can be treated with Nonsteroidal anti - inflammatory drugs, pain relivers, heat or ice applications, and physical therapy.
- Physiotherapy can be an effective treatment for lumbar spondylosis.
- Transcutaneous electrical nerve stimulation (TENS)
- NSAIDS
- Opioids medications
- Muscle relaxants

2.5 Complications

- Spinal stenosis
- Herniated disks
- Increased risk of cardiovascular diseases
- Bone spurs

Nursing management:

- Educate about aerobic and muscle strengthening exercises.
- Educate about practicing proper body mechanics.
- Lumbar back support can help with chronic low back pain.

Nursing Diagnosis:

- Pain in the neck related to inflammation and stiffness in joints as evidenced by patient facial expression.
- Impaired physical mobility related to pain as evidenced by verbalization.
- Self - care deficit related to reduced mobility.
- Disturbed sleep pattern related to pain and emotional stress.
- Knowledge deficit related to the treatment option and potential outcome.

3. Conclusion

Lumbar spondylosis is a common condition that can significantly impact quality of life if left untreated. Because lumbar spondylosis is a degenerative condition. However, there are various treatment process reduce the symptom and improve the patient's quality of life. This case study highlights the signs and symptoms, diagnosis, Investigations, Management, complications and nursing care of 42 years old women with lumbar spondylosis.

References

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