Conditions of the Cervical Spine

Key Points

It is common for elderly individuals to experience neck pain.

Majority of neck pain is related to cervical spondylosis or degenerative disease of the spine.

These conditions occur as a result of degeneration of the intervertebral disks, with loss of water content within the disks and subsequent disk collapse.

Common clinical syndromes associated with degenerative disk disease include cervical spondylosis, radiculopathy, and myelopathy.

Overview

Cervical Spondylosis is the degeneration of the joints of the neck.

- It most commonly leads to pain and decreased range of motion.
- Degenerative changes, with osteophytes, narrowing of disk spaces, and disk herniation, may cause encroachment on the spinal nerves or spinal cord and lead to radiculopathy and myelopathy.

Radiculopathy

- Pain occurs in a specific nerve root distribution.
- Radiculopathy usually results from disk herniation that impinges on an existing nerve root.
- In the older adult, the spinal foramina where the nerve root exits is often narrowed due to osteophytes from spondylosis.
- The interspace most commonly involved is the C5-C6 interspace.

Myelopathy

- This is compression of the spinal cord.
- Myelopathy is more likely if the spinal canal diameter is less than 10 mm.
- Radiographs typically show osteophytes and narrowing of disk spaces.
- Onset is insidious and myelopathy develops over a long period of time.
- Neurologic findings include lower motor neuron and reflex changes at the level of the lesion and upper motor neuron involvement below the level of lesion.
- Patients often develop spastic gait or other gait abnormalities.
- Many patients lose hand dexterity.
- Bowel and bladder incontinence can also occur.
Diagnosis

In generating a differential diagnosis in an older individual with neck pain, consider and rule out:

- **Neoplasms**, most commonly metastatic tumors in elderly;
- **Sepsis/infection**
- **Shoulder disorders**, rotator cuff tendonitis, subacromial bursitis, and acromioclavicular joint problems;
- **Entrapment neuropathies**, suprascapular nerve impingement, median and ulnar nerve compression, thoracic outlet syndrome.

Management

The majority of cervical symptoms in the geriatric patient can be treated with:

- Physical therapy
- Pain Medication including acetaminophen and anti-inflammatory medications
- Careful monitoring

Surgery may be indicated for a patient with:

- Myelopathy
- Progressive compression of the spinal cord.
- Significant nerve root encroachment that causes pain and progressive weakness in a specific nerve root distribution.
- Immobilization should be used only if necessary due to risk of further stiffness and muscle atrophy.

Bed rest is NOT a primary treatment.

References

