

Description

Cervical nerve root irritation refers to the 'pinching' or inflammation of a nerve within the cervical spine as it exits out of the spinal cord and from between the cervical vertebrae. This condition can often present as not only an unremitting dull ache in the neck, but often a sharp and/or burning sensation with or without referral into the arm and/or hand. Referred symptoms can include pain, pins and needles, numbness or weakness, or a combination of these.



Anatomy

The cervical spine is made up of 7 vertebrae (bones) and approximately 20 joints. There are three joints between each vertebra; one central joint, separated by a cartilage pad or disc and two joints either side that provide stability to each segment (facet joints). As we approach middle age (around 40), the normal gel-like cervical disc is generally hard and dry and the facet joints are becoming stiff.

The exit foramen are a narrow bony canal between each disc and facet joint that allow the 8 nerve roots on either side of the spinal column to exit the spinal cord and wind their way down into the upper limbs. It is at this point that the nerve root can become irritated and the thecal sac around the nerve sheath can become inflamed. The nerve roots can be pinched or irritated in association with a disc injury as they exit through the narrow canal causing local neck pain and referred symptoms.

Signs and Symptoms

Nerve root irritation commonly includes one or several of the following symptoms:

- Shooting, sharp or burning pain in one arm or hand
- Pins and needles or numbness in one arm or hand
- Sharp pain in the neck often on rapid movement
- Upper limb muscle weakness

Causes

The nerves in the cervical spine become irritated as they exit between the vertebrae in the neck. Structural changes or injuries to the exit pathway reduce the space available driving the irritation. These include:

- Inflammation or injuries to the facet joints
- Injured intervertebral disc (often in younger people)
- Trauma (eg direct blow to head, whiplash)
- Bony spurs (jagged outgrowths of bone called osteophytes)
- Anatomical predisposition (the individual make up of your neck).

Treatment

Immediate Care:

1. Rest (you may find sitting with your neck supported the most comfortable position)
2. Ice (heat can be valuable for temporary relief if a chronic condition and/or muscle spasm is present)
3. Physiotherapy
4. Anti-inflammatory and pain medication (see you doctor or pharmacist)

Your physiotherapist can provide you with a prognosis; recommend appropriate scans (such as xray, CT, or MRI) and may then incorporate some of the following techniques to reduce your symptoms:

- Activity advice – (avoid aggravating postures, fast movements and rest positions where the neck is well supported and comfortable)
- Joint mobilizations and Massage
- Neural mobilizations and stretching
- Manual Traction, taping techniques
- Postural correction and muscle retraining
- Workstation ergonomic advice

Please feel free to discuss any problems or queries with your physiotherapist or get up to date treatment options by subscribing online at www.rehabonthenet.com.