

# Neck and Arm Pain +/- Neurological Symptoms Neurology Referral Guidance for Primary Care

- Patients with neck and arm pain and associated neurological symptoms make up a substantial number of referrals to medical neurology in NHS Lothian
- Most patients with these symptoms may be better managed in primary care or secondary care services other than neurology.

Clinical Presentation	Refer to Neurology?	What does this usually turn out to be?	What should I do instead then?
NECK PAIN ALONE	NO	Muscular pain	Consider <b>red flags</b> (see below)
NECK AND ARM PAIN  NO DEFINITE NEUROLOGICAL SIGNS	RARELY INDICATED	Muscular pain Cervical Radiculopathy (rarely)	Conservative treatment with <b>physiotherapy referral</b> and <b>analgesia</b> .  Consider referral to <b>Musculoskeletal Services</b> or <b>Chronic Pain Services</b> .
NECK AND ARM PAIN  NEUROLOGICAL SYMPTOMS AND SIGNS	MAY OFTEN BE AVOIDED	Muscular pain combined with <ul style="list-style-type: none"> <li>• Carpal Tunnel Syndrome</li> <li>• Ulnar Nerve Irritation</li> <li>• Non specific sensory disturbance</li> </ul> Cervical Radiculopathy (rarely) Other causes rare— e.g. brachial neuritis	Sensory symptoms mainly in the hand and forearm often dont conform to textbook distributions are usually Carpal Tunnel Syndrome and/or Ulnar nerve irritation.  “NHS choices –Neck Pain” has useful links to neck exercise videos.
HAND PARAESTHESIA WITH OR WITHOUT PAIN	MAY OFTEN BE AVOIDED	Carpal Tunnel Syndrome (often whole hand tingling)	Trial of <b>wrist splints</b> at night for 3 months <b>prior</b> to <b>Hand Clinic</b> referral.
		Ulnar Nerve Symptoms (4 <sup>th</sup> and 5 <sup>th</sup> fingers)	Advise avoid pressure/prolonged flexion elbow. <b>Rarely requires referral to Neurology, investigation or treatment</b> –see neurodiagnosis.org
		Other	Consider Neurology referral.

**RED FLAGS include:** Systemic upset (weight loss, night sweats, fevers); Signs of spinal cord compression (e.g. gait disturbance, clumsy or weak hands, loss of sexual, Lhermitte's phenomenon, bladder or bowel dysfunction); Significant preceding trauma or neck surgery; History of TB, HIV, cancer or inflammatory arthritis

## Three Myths of Neck/Arm Pain



Plain cervical x-ray is usually a waste of time

- **“I need a plain x-ray to look for Cervical Spondylosis”**. EVERYONE gets cervical spondylosis as they get older – like grey hair. There is poor correlation between radiological ‘age-related’ changes and neck pain. Doing a plain cervical x-ray on someone with neck pain and telling them they have cervical spondylosis/arthrosis/“wear and tear” may be harmful /reduce the effectiveness of physio. Plain X-ray only indicated if red flags.
- **“I need an MR Cervical Spine to manage this patient”**. We often are asked for MR Cervical Spine to ‘show the cause’ of someone’s pain or because a physiotherapist has suggested it. MR C-spine is rarely helpful a) because usually it is muscular pain with radiation not radiculopathy; b) cervical radiculopathy usually improves with conservative treatment ; c) neurosurgery is rarely offered/has little evidence base in this area. **MR C-Spine is not available open access in NHS Lothian** . We request it mainly to look for spinal cord pathology.
- **“Nerve conduction studies may be helpful”**. Usually neck and arm pain is not radicular. We do not arrange nerve conduction studies in patients with ulnar nerve sensory symptoms. Carpal tunnel syndrome should go to the hand clinic first.

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