

Neck pain: a practical checklist approach

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Chronic neck pain (CNP) is pain of at least three months duration in the posterior cervical area (bounded by the occiput, C7 and anterior border of trapezii). Neck pain may be associated with headaches, shoulder pain, and pain in the interscapular area and arms (radicular pain).

Affecting 10% of adults, it is more common after middle age, in females and in higher SES and urban settings. CNP is a major cause of disability and economic burden, particularly following motor vehicle or workplace accidents.

The neck is susceptible to injury (whiplash) and physical loading (occupational overuse) and contains numerous structures (myofascial, neural) that generate pain. The neck and shoulders are particularly susceptible to pain neuro-sensitization, as seen by the strong link between whiplash-associated neck pain and fibromyalgia. Connections between the trigeminal nucleus (brainstem) and upper spinal cord (C2-C4) explain the association between neck pain and headaches.

Interestingly, stress-related neck pain reflects our quadruped ancestry, where increased muscle tension in the neck and shoulders allowed escape from sabre-toothed tigers during "fight and flight".

Inciting events include whiplash, trauma, postural loading (lifting, office work), spondylosis or spondylitis. Pain generators include myofascial trigger points, facet joints, intervertebral discs or nerve roots. In 80% of cases a clear-cut pain generator cannot be identified.

Whiplash-associated neck pain is a specific syndrome associated with flexion-extension loading of the neck, usually following a MVA. The best predictors of chronic neck pain and disability after whiplash are severe acute pain, anxiety and pain sensitisation (allodynia) in the neck and shoulders.

Management requires a multimodal, multidisciplinary approach. Unfortunately, there is only limited evidence to support many of the strategies below (note, botulinum toxin, spinal manipulation and some injections are missing).

CNP checklist

Recycle through the checklist and do ongoing review to monitor response.

- Are there any red flags? Exclude tumour, inflammation (spondylitis), infection (discitis), neurological problems (root, cord, plexus) and trauma (fracture, cervical instability) (T.I.N.T.). If there are concerns an MRI is indicated. Severe radicular arm pain or neurological signs warrant urgent MRI and neurosurgical review.
- Yellow flags of catastrophizing, hyper vigilance, anxiety, a medical focus and passive coping (C.H.A.M.P) can predict chronic pain and disability.

- Look for and manage simple pain generators and contributors to headaches.
- Educate about realistic outcomes and functional goals. Reassure about imaging findings and that "hurt doesn't equal harm". Encourage de-medicalisation and engagement in a pain program.
- Useful analgesics are tramadol, tapentadol, duloxetine, pregabalin (for radicular pain), paracetamol, transdermal buprenorphine, celecoxib (pain flare ups), and NSAID gel. Some drugs are used off-label for pain.
- Physical therapies involve activity-pacing, walking, exercises (strengthening and stretching) ergonomics (posture, pillows), hot or cold packs, TENS and acupuncture.
- Psychosocial care for anxiety and stress includes clinical psychology, antidepressants, injury rehabilitation and help with compensation claims.
- Local anaesthetic injections or 'needling' and physiotherapy can assist in neck and shoulder pain (trapezius trigger points) or interscapular pain (rhomboid trigger points).
- Neck pain and headache from greater occipital neuralgia may respond to a local anaesthetic and steroid block. Facet joint pain can be treated via injection or radiofrequency neurotomy.
- Steroid nerve root sleeve or epidural injections are poorly effective for radicular arm pain and carry a rare but serious risk of stroke or death. A pain specialist, neuro or spinal surgeon should be consulted if these procedures are contemplated.

Further reading:

Teichtahl AJ, McColl G. An approach to neck pain for the family physician. *Australian Family Physician* 2013; 42 (11): 774-778.

Clinical guidelines from: www.nhmrc.gov.au/guidelines-publications/cp112

Author competing interests;

Dr Visser has received honoraria for education from Pfizer, Servier, Mundipharma and Janssen in the past 5 years. Questions? Contact the author on 9400 9020.



Shoulder and neck pain

Films are in the Bag

As our feature on Page 22 reveals, there's not much that a smart phone can't do. A new program from Zed Technologies makes radiology scans and x-rays accessible for consumers to view, share and manage with a swipe of their phone screen.

My Film Bag WA manager Chris Tansell said the program gives the consumer more control over their own health.

"A person creates a My Film Bag account and after a scan, the radiologist will send a text message to inform them that a copy of their images has been sent to the My Film Bag cloud. Account holders can access the cloud with a code and share their images."

Our understanding is that changes to Privacy Law introduced in 2014, mean any patient medical information placed with an iCloud provider is best de-identified to protect the doctor.

My Film Bag has the potential to reduce the public-private information divide as CDs can be uploaded to a person's account, so GPs on follow-up visits can see what work has been done.

On the business side, the technology could also save imaging providers on x-ray film and administration. It is also compatible with most practice software. ●