

This tool provides information to facilitate the management of recent onset and persistent neck pain for adults

Focused examination



1. Patient History

- Rule out major structural or other pathologies. If required, refer to an appropriate healthcare provider.
- Identify and assess other conditions and co-morbidities. Manage using appropriate care pathways.
- Address prognostic factors that may delay recovery.

Major structural or other pathologies (red flags):

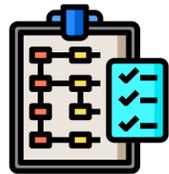
- Cancer (history of cancer, unexplained weight loss, nocturnal pain, age >50), vertebral infection (fever, intravenous drug use, recent infection), osteoporotic fractures (history of osteoporosis, use of corticosteroid, older age), traumatic fracture (positive [Canadian C-Spine rule](#)), myelopathy - severe/progressive neurological deficits (painful stiff neck, arm pain and weakness, sensory changes in lower extremity, motor weakness and atrophy, hyper-reflexia, spastic gait), carotid/vertebral artery dissection (sudden and intense onset of headache or neck pain), brain haemorrhage/mass lesion (sudden and intense onset headache), inflammatory arthritis (morning stiffness, swelling in multiple joints)

Examples of other conditions/co-morbidities:

- Physical conditions: back pain, headache
- Psychological conditions: depression, anxiety
- Co-morbidities: diabetes, heart disease

Examples of prognostic factors that may delay recovery:

- Symptoms of depression or anxiety, passive coping strategies, job dissatisfaction, high self-reported disability levels, disputed compensation claims, somatization



2. Physical Examination

- Rule out major structural or other pathologies and grade IV NAD.
- Assess for neurological signs.
- Identify type of neck pain.

Grade I: No signs or symptoms of major structural pathology and no or minor interference with activities of daily living
Grade II: No signs or symptoms of major structural pathology but major interference with activities of daily living
Grade III: No signs or symptoms of major structural pathology but presence of neurologic signs
Grade IV: Signs and symptoms of major structural pathology

3. Management

- Offer information on nature, management, and the course of neck pain. See [patient handouts](#) for more information to provide to patients.
- Discuss the range of effective interventions with the patient and, together, select a therapeutic intervention.

4. Reevaluation and discharge

- Reassess the patient at every visit to determine if: (1) additional care is necessary; (2) the condition is worsening; or (3) the patient has recovered.
- Monitor for any emerging factors that may delay recovery.

Incorporate one or more valid and reliable outcome measurements when assessing and monitoring patients

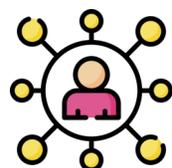
- [Self-rated Recovery Question](#)
- [Patient-specific Functional Scale](#)
- [Neck Disability Index](#)

- [Numeric Pain Rating Scale](#)
- [World Health Organization Disability Assessment Schedule](#)
- [Pittsburgh Sleep Quality Index](#)

Visit our website for more [outcome measurements](#)

5. Referrals and collaboration

- Refer the patient to an appropriate healthcare provider for further evaluation at any time during their care if they develop worsening symptoms and new physical or psychological symptoms.



Therapeutic Recommendations - Recent-onset (0-3 months symptom duration) neck pain, grades I-II

Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any one of the following therapeutic interventions*:

Consider range of motion exercise

Consider multimodal care[†]

- combination of range of motion exercise and manipulation or mobilization

Consider a short course of muscle relaxants (as indicated)

Do not offer structured patient education alone, strain-counterstrain therapy, relaxation massage, cervical collar, electroacupuncture, electrotherapy, or clinic-based heat

Do not offer or recommend acetaminophen as a routine intervention

Therapeutic Recommendations - Persistent (4-6 months symptom duration) neck pain, grades I-II

Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any one of the following therapeutic interventions*:

Consider range of motion and strengthening exercises, qigong or yoga

Consider clinical massage

Consider low-level laser therapy

Consider multimodal care[†]

- Range of motion exercise and manipulation or mobilization

Consider non-steroidal anti-inflammatory drugs (NSAIDs) (as indicated)

Do not offer strengthening exercises alone, strain-counterstrain therapy, relaxation massage, relaxation therapy for pain or disability, electrotherapy, shortwave diathermy, clinic-based heat, electroacupuncture, or botulinum toxin injections

Therapeutic Recommendations - Recent-onset (0-3 months symptom duration) neck pain, grade III

Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and the following therapeutic intervention*:

Consider supervised strengthening exercise

Do not offer structured patient education alone, cervical collar, low-level laser therapy, or traction

Therapeutic Recommendations - Persistent (4-6 months symptom duration) neck pain, grade III

Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and the following therapeutic intervention*:

Consider referring to an appropriate healthcare provider for investigation and management for patients who continue to experience neurological signs and disability more than 3 months after injury

Do not offer a cervical collar

*Interventions are recommended if guidelines used terms such as 'recommended for consideration' (e.g., 'offer', 'consider'), 'strongly recommended', 'recommended without any conditions required', or 'should be used'. Recommendations from low-quality evidence are not listed.

[†]Multimodal care: treatment involving at least two distinct therapeutic modalities, provided by one or more health care disciplines.

Examples of exercises for the neck and shoulder



Strengthening neck retraction

Sitting: Tuck in chin slightly elevating the head toward the ceiling, as if the ears are the pivoting point. Completing this movement should take two to three seconds. Repeat 10 times

Supine: Lying comfortably on back without any pillow, slide head upward while keeping chin tucked in. You should feel a gentle stretch behind the neck. Completing this movement should take 2-3 seconds. Repeat 10 times



Scapular retraction

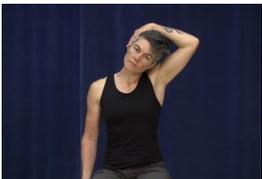
Sitting: Seated, tuck chin in. Retract shoulder blades towards the spine. Do not raise shoulders, especially if a shoulder condition exists. Maintain the contraction for 2-3 seconds. Do 2 sets of 10 repetitions

With weights, inclined position: While maintaining the trunk forward, raise a small weight or dumbbell towards the ceiling while retracting the shoulder blade. Do three series of 10 repetitions daily.



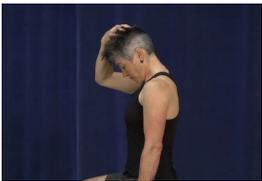
Isometric strengthening in flexion - standing

Tuck chin in and place the palm of the hand over the forehead. Without any head movement, gently push the forehead against hand. Maintain the contraction for 2-3 seconds. Do two sets of 10 repetitions daily. Remember to keep chin tucked in before each repetition



Trapezius stretching

Seated, keep the chin retracted and tilt head to one side. Take care not to lift shoulder on the side being stretched. Use the hand on the opposite side to increase the stretch. Maintain this position for 30 seconds and repeat on the other side



Neck extensor stretching

With the help of one hand, in a sitting position, bring chin to the sternum and bend the neck forward. Maintain this position for 30 seconds.



Retraction flexion supine

Lie on back and tuck chin in by sliding head upward. Slightly raise head towards the sternum while keeping chin tucked in. Do two series of 10 repetitions daily.

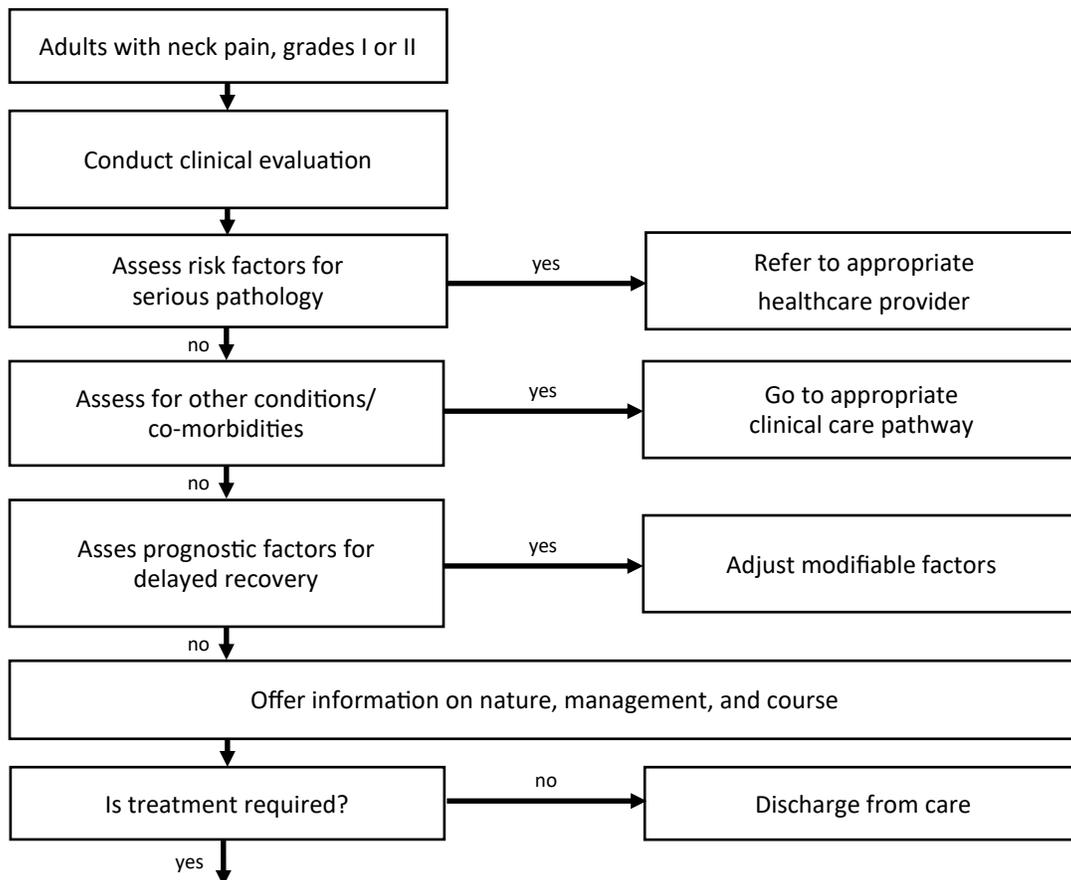


Neck motor control

Lie on back with knees bent without a pillow under head and neck. If this is not comfortable, place a small, folded towel under head for support. Start by looking up at a point on the ceiling, then, with your eyes, look at a spot on the wall just above the knees. Feel the back of the head slide up the bed as you perform a slow and gentle nod, as if you're indicating "yes." Place your hand gently on the front of your neck to feel the superficial muscles. Make sure they stay soft and relaxed when doing the head nod movement. Stop at the point you sense the muscles are beginning to harden, but keep looking down with your eyes. Hold the position for ten seconds then relax. Look up to a point on the ceiling to resume the starting position. Repeat 10 times.

Visit our website for more [exercises and videos](#) and [patient resources](#)

Care pathway for the management of neck pain, grades I and II



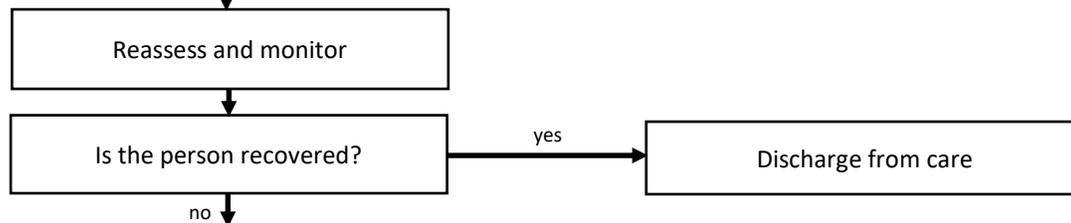
Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any one of the following therapeutic interventions*:

Symptoms ≤ 3 months

- Range of motion exercises
- Multimodal care[†]
 - combination of range of motion exercises and manipulation or mobilization
- Short course of muscle relaxants (as indicated)

Symptoms > 3 months

- Range of motion and strengthening exercises, qigong, or yoga
- Clinical massage
- Low-level laser therapy
- Multimodal care[†]
 - combination of range of motion exercises and manipulation and mobilization
- Non-steroidal anti-inflammatory drugs (as indicated)

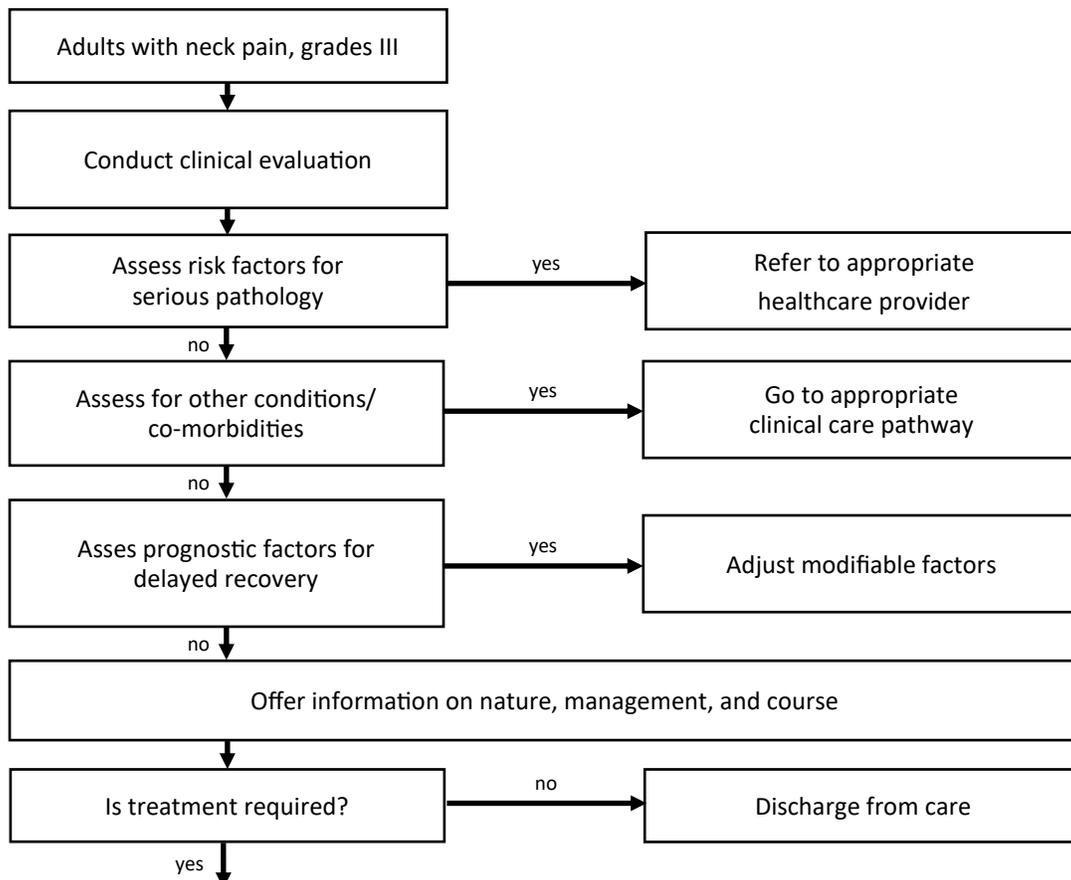


1. Incomplete recovery: for symptoms ≤ 3 months, initiate persistent protocol; for symptoms > 3 months, refer to appropriate healthcare provider
2. Signs progress to grade III: proceed to grade III care pathway
3. Major symptom change (new or worsening physical, mental or psychological symptoms): refer to appropriate healthcare provider

*Interventions are recommended if guidelines used terms such as 'recommended for consideration' (e.g., 'offer', 'consider'), 'strongly recommended', 'recommended without any conditions required', or 'should be used'. Recommendations from low-quality evidence are not listed.

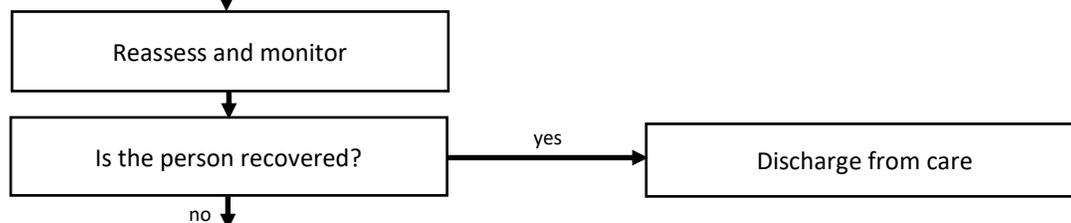
[†]Multimodal care: treatment involving at least two distinct therapeutic modalities, provided by one or more health care disciplines.

Care pathway for the management of neck pain, grades III



Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and the following therapeutic interventions*:

Symptoms ≤ 3 months	Symptoms > 3 months
<ul style="list-style-type: none"> Supervised neck strengthening exercises 	Refer to physician for consideration of further investigation of the neurological deficits



- Incomplete recovery: for symptoms ≤ 3 months, initiate persistent protocol; for symptoms > 3 months, refer to appropriate healthcare provider
- Major symptom change (new or worsening physical, mental or psychological symptoms): refer to appropriate healthcare provider

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This summary is based on information provided by the following high-quality clinical guideline:

- [Côté, P., Wong, J.J., Sutton, D. *et al.* Management of neck pain and associated disorders: A clinical practice guideline from the Ontario Protocol for Traffic Injury Management \(OPTIMa\) Collaboration. *Eur Spine J* **25**, 2000–2022 \(2016\).](#)