

This tool provides information to facilitate the management of persistent headaches associated with neck pain for adults

## Focused examination



### 1. Patient History

- Assess level of concern for 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 may be suspected with certain signs and symptoms (red flags) including:

- Worsening headache with fever; sudden-onset headache (thunderclap) reaching maximum intensity within 5 minutes; new-onset neurological deficit; new-onset cognitive dysfunction; change in personality; impaired level of consciousness; recent (typically within the past 3 months) head trauma; headache triggered by exertion (e.g., cough, valsalva maneuver (trying to breathe out with nose and mouth blocked), sneeze or exercise); headache that changes with posture; symptoms suggestive of giant cell arteritis; symptoms and signs of acute narrow-angle glaucoma; a substantial change in the characteristics of the patient's headache; new onset or change in headache in patients who are aged over 40; headache waking the patient up (migraine is the most frequent cause of morning headache); patients with risk factors for cerebral venous sinus thrombosis; jaw claudication or visual disturbance; neck pain or stiffness; limited neck flexion upon examination; new onset headache in patients with a history of human immunodeficiency virus (HIV) infection; new -onset headache in patients with a history of cancer

Examples of other conditions/co-morbidities:

- Physical conditions: back pain, neck pain
- 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

- Assess levels of concern regarding major structural or other pathologies.
- Assess for neurological signs.
- Identify type of headache.

- **Tension-type headache** feels like there is a tight band around the head
  - **Episodic:** at least 10 episodes occurring on  $\geq 1$  but  $< 15$  days per month for at least 3 months ( $\geq 12$  and  $< 180$  days per year)
  - **Chronic:** occurring on  $\geq 15$  days per month on average for  $> 3$  months ( $\geq 180$  days per year)
- **Cervicogenic headache** is head pain coming from the neck

### 3. Management

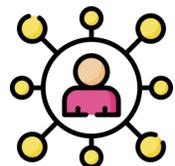
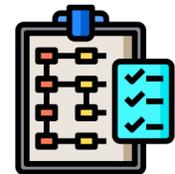
- Offer information on nature, management, and the course of headaches associated with neck pain. See [patient handouts](#) for more information to provide to patients.
- Discuss the range of effective interventions with the patient and, together, select a therapeutic intervention.

### 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.

### 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.



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

- [Self-rated Recovery Question](#)
- [Patient-specific Functional Scale](#)
- [Headache Impact Test –6](#)
- [Headache Disability Index](#)
- [Numeric Pain Rating Scale](#)
- [Pittsburgh Sleep Quality Index](#)

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

### Therapeutic Recommendations - Persistent (>3 months symptom duration) cervicogenic headaches

**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** low-load endurance craniocervical and cervicospinal exercises with resistance

**Consider** manual therapy (manipulation with or without mobilization) to the cervical and thoracic spine

**Do not offer** multimodal care that includes a combination of exercise, spinal manipulation and spinal mobilization<sup>1</sup>

### Therapeutic Recommendations - Episodic tension-type headache (>3 months symptom duration)

**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** low-load endurance craniocervical and cervicospinal exercises with resistance

**Do not offer** manipulation of the cervical spine<sup>2</sup>

### Therapeutic Recommendations - Chronic tension-type headaches (>3 months duration)

**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** general exercise (including warm-up, neck and shoulder stretching and strengthening, and aerobic exercise)

**Consider** low-load craniocervical and cervicospinal exercises

**Consider** multimodal care<sup>†</sup>

- Combination of spinal mobilization, craniocervical exercise and postural correction

**Consider** clinical massage

**Do not offer** manipulation of the cervical spine as the sole form of treatment<sup>3</sup>

\*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.

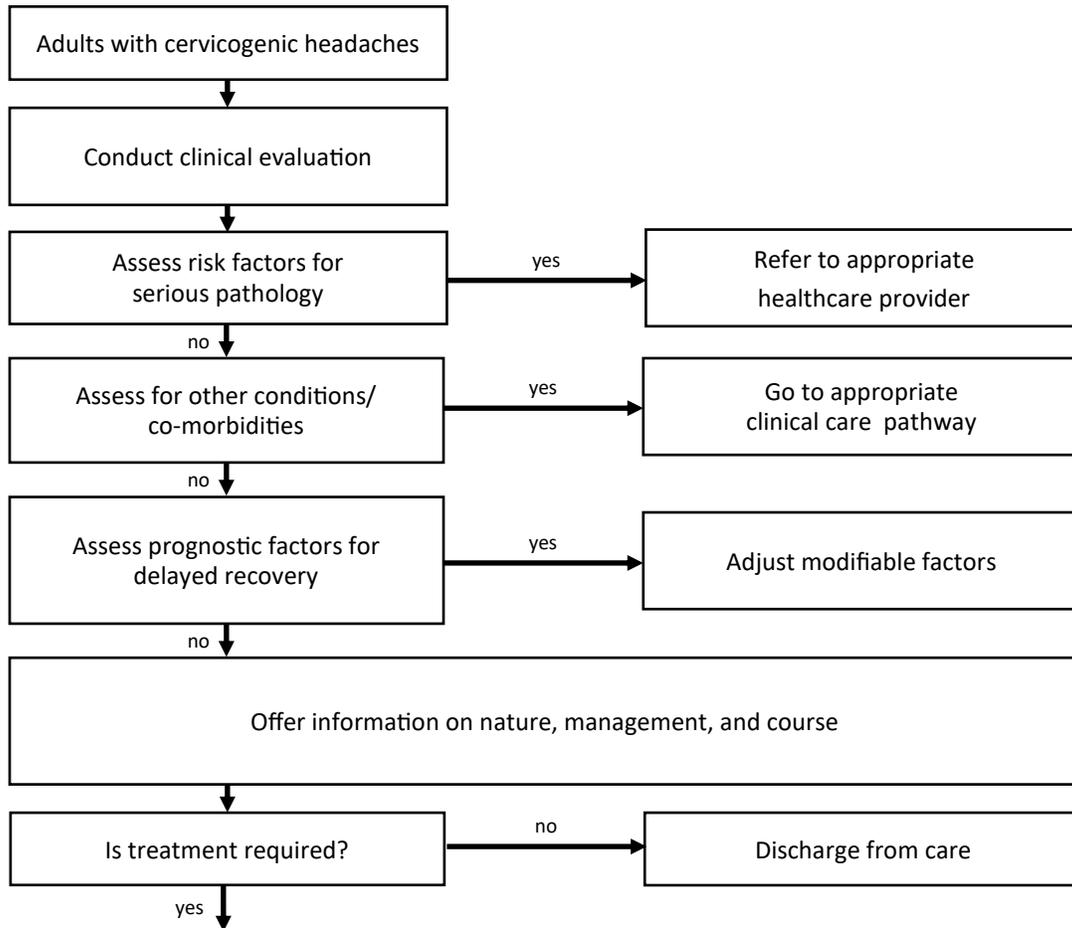
<sup>†</sup>Multimodal care: treatment involving at least two distinct therapeutic modalities, provided by one or more health care disciplines.

<sup>1</sup>Combination of interventions provides no added benefit when compared to either intervention given alone

<sup>2</sup>No evidence of effectiveness between the intervention of interest and the comparison intervention

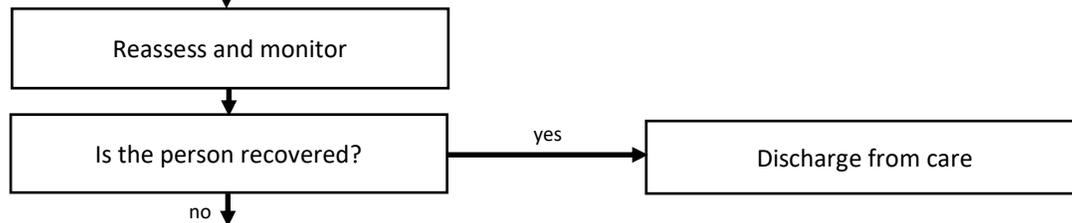
<sup>3</sup>No evidence of effectiveness when provided as an independent intervention

## Care pathway for the management of cervicogenic headaches



**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\*:**

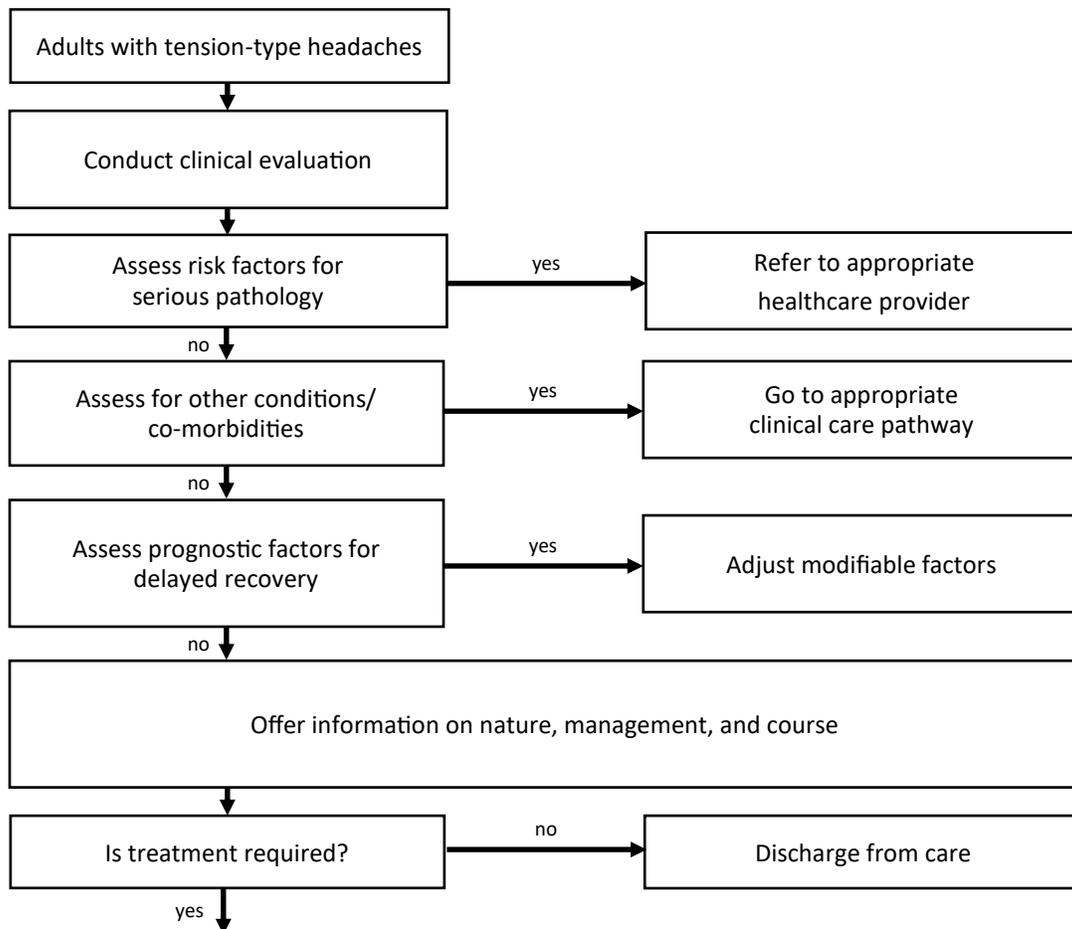
- Low-load endurance craniocervical and cervicospular exercises
- Manual therapy (manipulation with or without mobilization) to the cervical and thoracic spine



**Incomplete recovery or major symptom change (new or worsening physical, psychological or psychological symptoms): refer to appropriate healthcare provider**

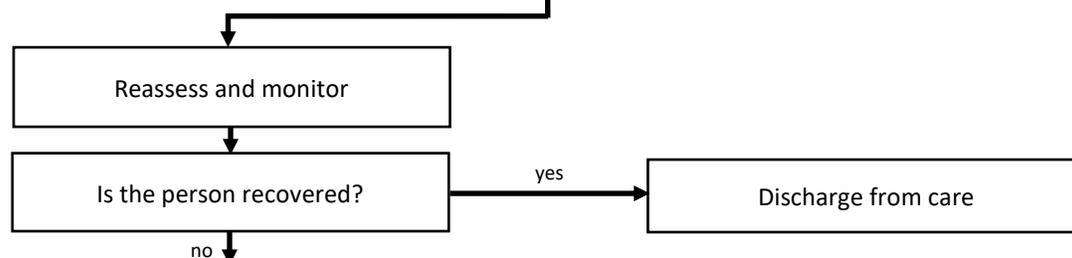
\*Interventions are recommended if guidelines used terms such as 'recommended for consideration' (e.g., 'offer', 'consider'), 'strongly recommended', 'recommended without any conditions required', or 'should be used'. Recommendations from low-quality evidence are not listed.

## Care pathway for the management of tension-type headaches



**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\*:**

Episodic tension-type headaches	Chronic tension-type headaches
<ul style="list-style-type: none"> <li>• Low-load endurance craniocervical and cervicospicular exercises</li> </ul>	<ul style="list-style-type: none"> <li>• General exercise</li> <li>• Low-load endurance craniocervical and cervicospicular exercises</li> <li>• Multimodal care: combining spinal mobilization, craniocervical exercises and postural correction</li> <li>• Clinical massage</li> </ul>



Incomplete recovery or 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.

## Examples of neck and shoulder exercises



### Strengthening neck retraction—sitting

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



### Low Row

While standing, hold onto an anchored band facing you with both hands. Pull the band toward you with both hands so that the shoulder blades come together. Focus on feeling the muscles of the shoulder blades. Perform 2-3 sets of 10-12 repetitions

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

[Côté P, Yu H, Shearer HM, Randhawa K, Wong JJ, Mior S, Ameis A, Carroll LJ, Nordin M, Varatharajan S, Sutton D, Southerst D, Jacobs C, Stupar M, Taylor-Vaisey A, Gross DP, Brison RJ, Paulden M, Ammendolia C, Cassidy JD, Loisel P, Marshall S, Bohay RN, Stapleton J, Lacerte M. Non-pharmacological management of persistent headaches associated with neck pain: a clinical practice guideline from the Ontario Protocol for Traffic Injury Management \(OPTiMa\) Collaboration. Eur J Pain. 2019. 23\(6\): 1051-1070.](#)