Strategies and tips for treating non-migraine headaches

Ontario College of Family Physicians | Practising Well
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PANELISTS

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WITH

Dr. Stephanie Zhou • Dr. Nikki Bozinoff

Family & Community Medicine
UNIVERSITY OF TORONTO

Please introduce yourself in the chat!

@OntarioCollege
#PractisingWell

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Relationships with financial sponsors (including honoraria):

- Ontario College of Family Physicians – Practising Well CoP Speaker
- St. Joseph's Care Group (Thunder Bay) – ECHO Chronic Pain and Opioid Stewardship

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- Ontario College of Family Physicians – Practising Well CoP Speaker

Disclosures

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- Habitat for Humanity GTA – Board of Directors member
- Toronto Public Health – Board of Directors member

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- Ontario College of Family Physicians – Practising Well Implementation Group Member, CoP Speaker
- CAMH
- Department of Family and Community Medicine (University of Toronto)
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Potential for conflict(s) of interest:
N/A

Mitigating Potential Bias

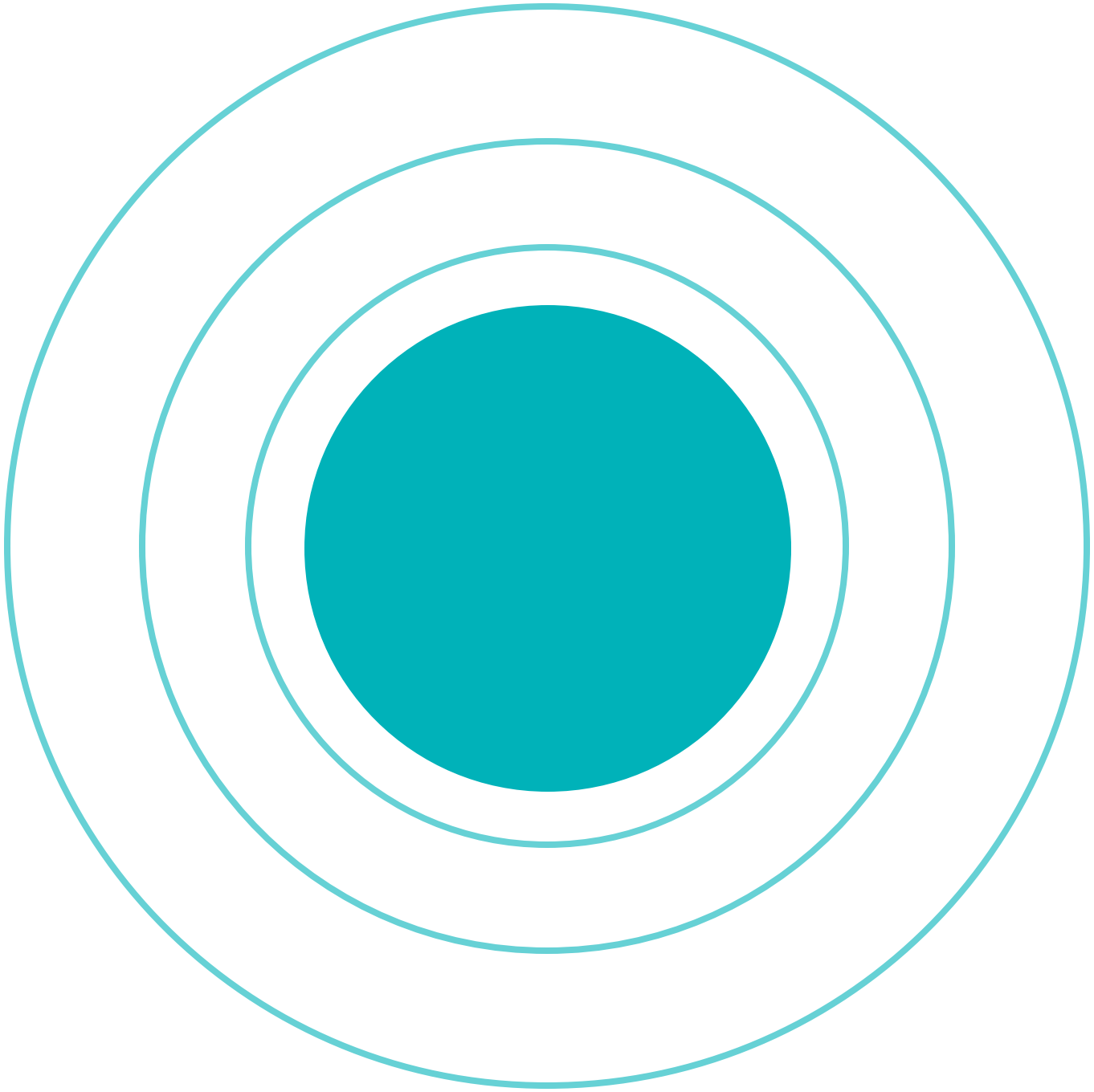
- The Scientific Planning Committee (SPC) has control over the choice of topics and speakers.
- Content has been developed according to the standards and expectations of the Mainpro+ certification program.
- The program content was reviewed by the SPC.

Land Acknowledgement

We acknowledge that the lands on which we are hosting this meeting include the traditional territories of many nations.

The OCFP and DFCM recognizes that the many injustices experienced by the Indigenous Peoples of what we now call Canada continue to affect their health and well-being. The OCFP and DFCM respects that Indigenous people have rich cultural and traditional practices that have been known to improve health outcomes.

I invite all of us to reflect on the territories you are calling in from as we commit ourselves to gaining knowledge; forging a new, culturally safe relationship; and contributing to reconciliation.



Strategies and tips for treating non-migraine headaches

You raised important questions we'll try to work through together today:

1. Differentiating between various headache types; touch upon uncommon types
2. Medication related
    1. Determining optimal medications and their prescription details (dose, frequency)
    2. Assessing the usefulness and effectiveness of anti-hypertensive drugs for headache relief
    3. The role of opioids in headache management
3. Headache hygiene recommendations
4. Key components of a valuable neurological examination; identifying red flags and the need for additional assessments; indications for referring patients
5. Affordable treatment options

And other questions you add in the Q&A box…

Strategies and tips for treating non-migraine headaches

Your Panelists

Dr. Virginia McEwen

Thunder Bay, ON

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Thunder Bay, ON

DR. SHERI WARK

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Non-migrainous Headaches

History

Table 6.1. Important Components to Include in the Focused Headache History

1. Headache frequency
2. Headache duration
3. Headache location
4. Headache intensity
5. Quality of the pain (pressure, throbbing, stabbing)
6. Associated symptoms (e.g., nausea/vomiting)
7. Precipitating/provoking factors
8. Alleviating factors
9. Previous treatment experiences and responses to date (including benefits and side-effects)

Red Flags

Headache navigator red flags

Red Flags (imaging recommendations)

Emergent - address immediately

- Thunderclap onset (CT)
- Fever and meningismus (CT)
- Papilloedema (+focal signs or reduced LOC) (MRI)
- Acute glaucoma (no current recommendation)

Urgent - address hours to days

- Temporal arteritis (no imaging recommended)
- Papilloedema (NO focal signs or reduced LOC) (MRI or CT)
- Relevant systemic illness (MRI or CT)
- Elderly: new headache with cognitive change (CT)

Possible indicators of secondary headache (imaging recommendations)

- Unexplained focal signs (MRI or CT)
- Atypical headaches (CT)
- Unusual headache precipitants (MRI or CT)
- Onset after age 50 (MRI or CT)
- Aggravation by neck movement; abnormal neck exam. Consider cervicogenic headache refer and/or investigate but also proceed down the algorithm (no current recommendations)
- Jaw symptoms; abnormal jaw exam. Consider temporomandibular disorder (no current recommendations)

Still look for migraine headaches. . .

- Underdiagnosed
- Criteria for tension type headaches often misunderstood

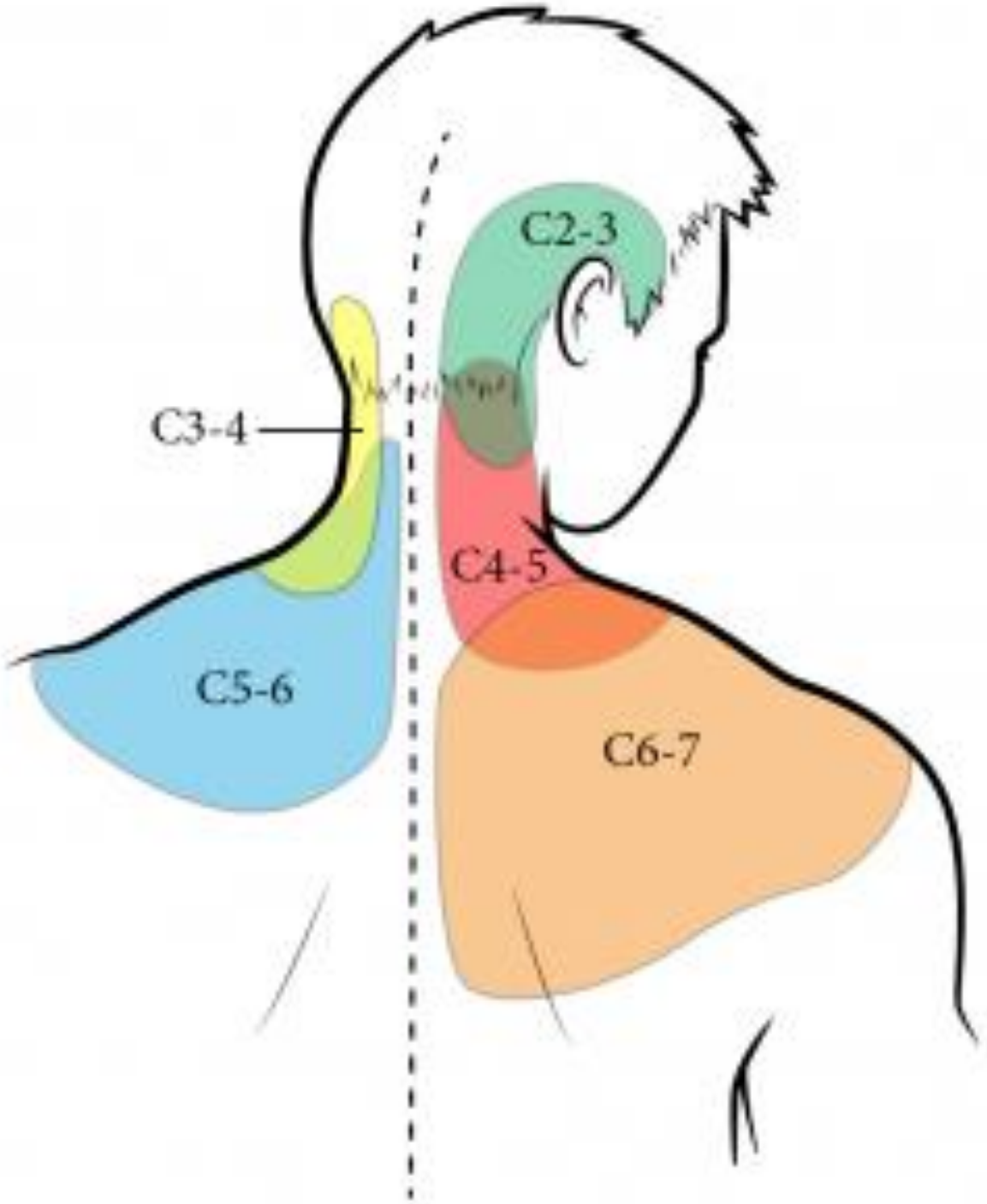
  Ex. migraine headaches are only unilateral, only pulsatile, occur with aura

  - headache-summary.pdf (albertadoctors.org)
  - Post-concussion headaches often have migrainous features

ICHD-3 Criteria The International Classification of Headache Disorders - ICHD-3
4-72 hours duration
2 of 4 characteristics: unilateral, throbbing/pulsating, moderate-severe intensity, aggravation by or avoidance of physical activity
During headache at least one of the following: nausea and/or vomiting, photo AND phonophobia

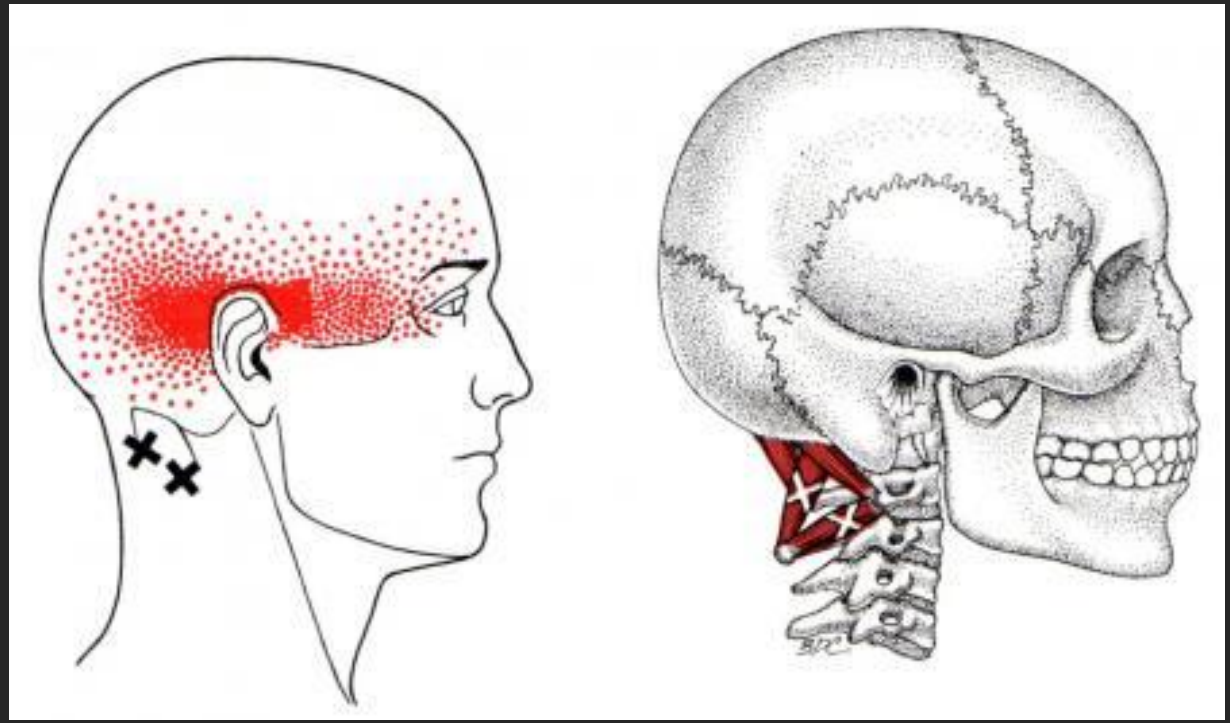
Cervicogenic headaches

- Commonly acutely triggered by whiplash
- Can also simply occur with arthritis
- Mimics tension-type headache
- CORE Neck Tool CEP_HeadandNeck_2016_v15.2-1.pdf



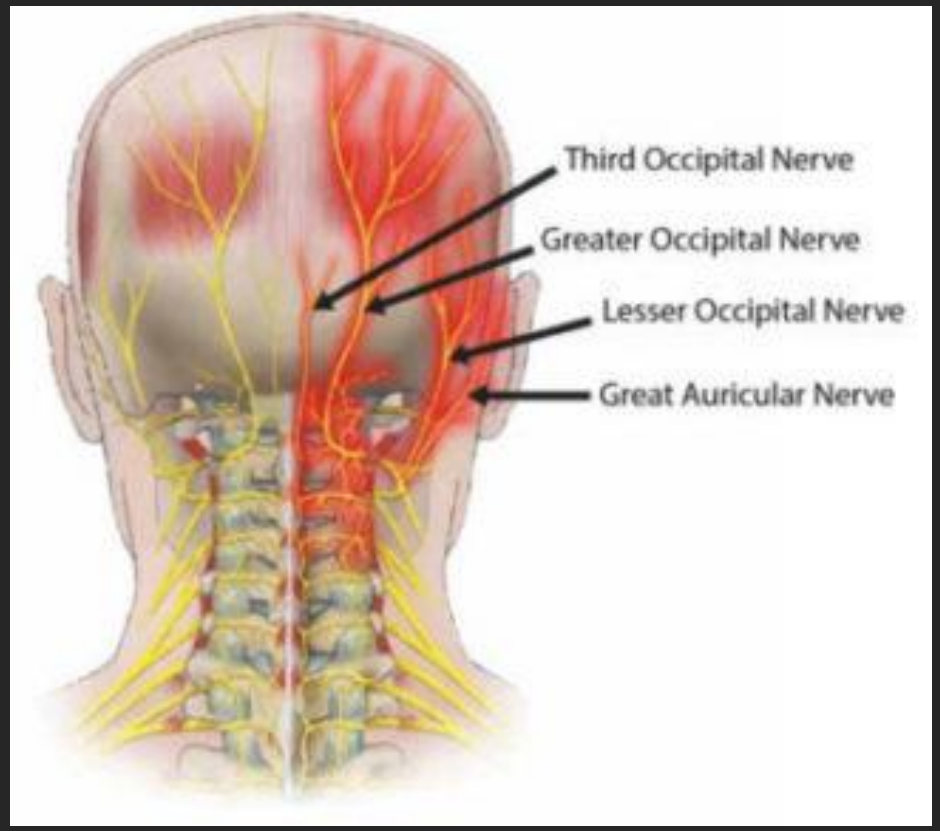
Tension type headache

- Often myofascial, http://www.triggerpoints.net a good visual resource for patients
- Remember to consider the TMJ



Occipital neuralgia

- Common
- Can also be confused with tension type headache
- Hoodlike pattern



Post-concussion/traumatic headaches

- Headache is the most common prolonged symptom following concussion and is classified as a secondary, rather than primary headache subtype (develops within 7 days of the trauma).

- It is estimated that up to 58% of patients with TBI will develop a headache at 1 year after the trauma

- Acute Concussion/PTH usually resolves within a few weeks, but persistent PTH can cause significant disability for those affected

Clinical Presentation

- Usually characterized by symptoms such as nausea, vomiting, headache after physical activity and stress, headache exacerbated by light and sound, and impaired cognitive and psychosocial functions.

- These symptoms resemble those of various types of primary headaches, and the most frequent PTH phenotypes are migraine-like or tension-type-like headaches, but can also include cervicogenic, physiological (exercise-induced), occipital neuralgia or headaches associated with prolonged visual stimulation.

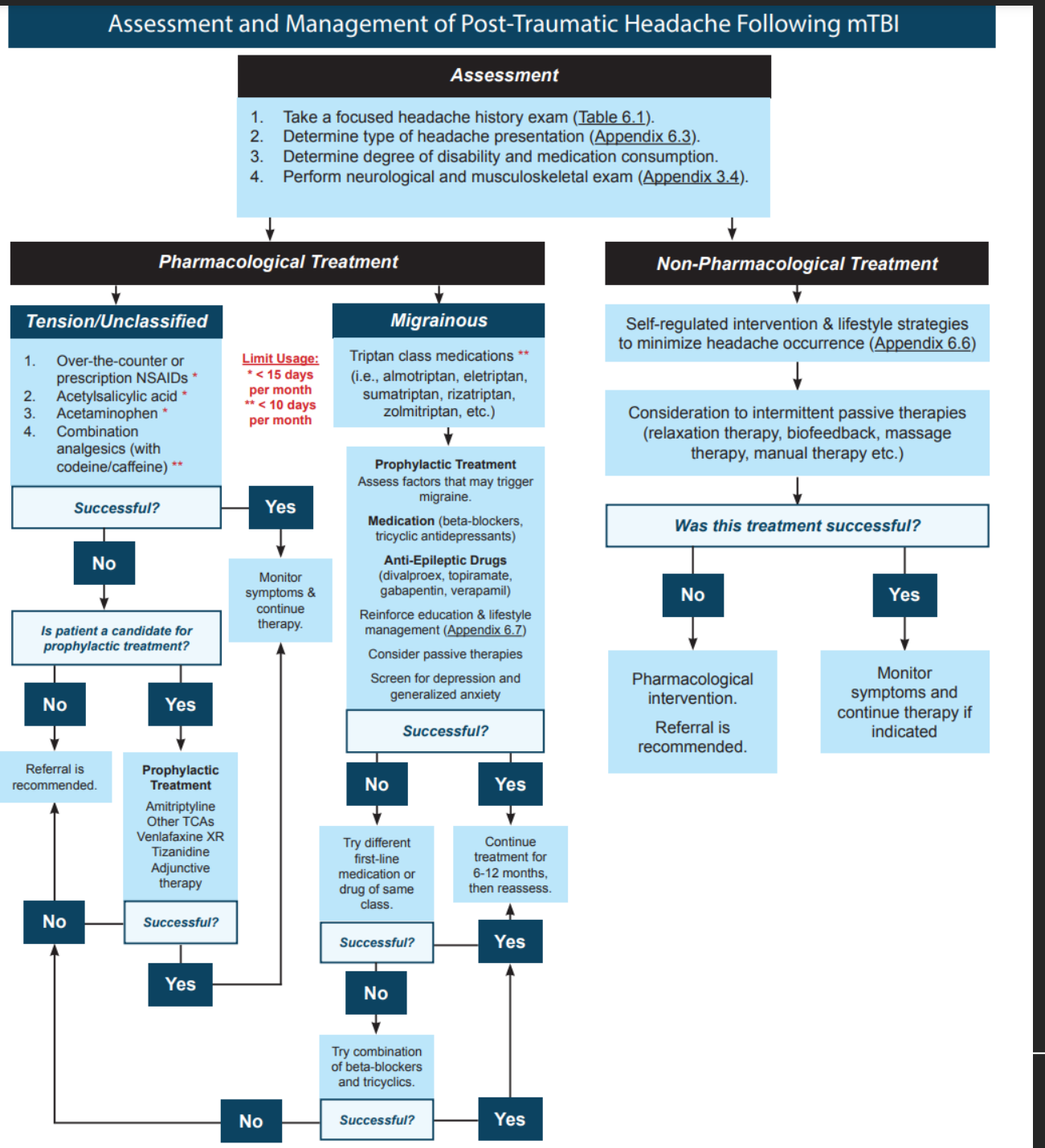

Assessment and Management of Post-Traumatic Headache Following mTBI
Assessment
1. Take a focused headache history exam (Table 6.1).
2. Determine type of headache presentation (Appendix 6.3).
3. Determine degree of disability and medication consumption.
4. Perform neurological and musculoskeletal exam (Appendix 3.4).
Pharmacological Treatment
Non-Pharmacological Treatment
Tension/Unclassified
1. Over-the-counter or prescription NSAIDs *
2. Acetylsalicylic acid *
3. Acetaminophen *
4. Combination analgesics (with codeine/caffeine) **
Limit Usage:
* < 15 days per month
** < 10 days per month
Migrainous
Triptan class medications ** (i.e., almotriptan, eletriptan, sumatriptan, rizatriptan, zolmitriptan, etc.)
Successful?
Yes
No
Monitor symptoms & continue therapy.
Is patient a candidate for prophylactic treatment?
No
Yes
Referral is recommended.
Prophylactic Treatment
Amitriptyline
Other TCAs
Venlafaxine XR
Tizanidine
Adjunctive therapy
No
Successful?
Yes
Prophylactic Treatment
Assess factors that may trigger migraine.
Medication (beta-blockers, tricyclic antidepressants)
Anti-Epileptic Drugs (divalproex, topiramate, gabapentin, verapamil)
Reinforce education & lifestyle management (Appendix 6.7)
Consider passive therapies
Screen for depression and generalized anxiety
Successful?
No
Yes
Try different first-line medication or drug of same class.
Continue treatment for 6-12 months, then reassess.
Successful?
Yes
No
Try combination of beta-blockers and tricyclics.
No
Successful?
Yes
Self-regulated intervention & lifestyle strategies to minimize headache occurrence (Appendix 6.6)
Consideration to intermittent passive therapies (relaxation therapy, biofeedback, massage therapy, manual therapy etc.)
Was this treatment successful?
No
Yes
Pharmacological intervention.
Referral is recommended.
Monitor symptoms and continue therapy if indicated

Table 1 Comparison of the characteristics between persistent PTH and primary headaches

From: Persistent post-traumatic headache: a migrainous loop or not? The clinical evidence

	Persistent PTH	Migraine	Tension-type headache	Cluster headache
Prevalence	18–58% after TBI	6–33%	62%	0.1%
Risk factors	-Prior history of headache -Female gender - Older age - Family history of headache	-Young age -Female gender	-Anxiety -Depression	-Young age -Male gender
Duration of episodes	Variable	180 min-3 days	30 min-7 days	15–180 min
Headache symptoms	-Migraine-like -Tension-type headache like -Cluster like	-Severe intensity -Unilateral location -Pulsatile quality -Aggravated by activity	-Mild/moderate intensity -Bilateral location -Pressing quality -Not aggravated by activity	-Severe intensity -Unilateral, orbital or periorbital
Associated symptoms	-Sleep disorders -Affective and behavioral disorders -Cognitive deficits	-Nausea or vomiting -Photophobia and phonophobia	-Photophobia, phonophobia or nausea	-Conjunctival injection, nasal congestion, eyelid edema, miosis, ptosis. -Sense of restlessness or agitation
Imaging (MRI)	-Less cortical thickness in bilateral frontal regions and right hemisphere parietal regions of the brain -Gray matter changes in the prefrontal cortex.	-White matter hyperintensities	-Normal	-Normal
Neurophysiological studies (EEG)	Early abnormalities (focal slowing, absence of activity, amplitude asymmetries)	-H response to flicker stimulation -Abnormal resting-state EEG rhythmic activity	Normal	Normal
Treatment	-Behavioral -Drugs depending on phenotype	-Acute: NAIDs / triptans -Preventive: β-blockers, antiepileptics, antihypertensive, CGRP Abs	-Acute: NAIDs -Preventive: antidepressants	-Acute: triptans/O2 -Preventive: corticosteroids, verapamil

Medication overuse headaches (MOH)

- Headache occurring on 15 or more days per month developing as a consequence of regular overuse of acute or symptomatic headache medication (on 10 or more or 15 or more days per month, depending on the medication) for more than three months.
- It usually, but not invariably, resolves after the overuse is stopped.

Diagnostic criteria:

- A. Headache occurring on ≥15 days per month in a patient with a pre-existing headache disorder
- B. Regular overuse for >3 months of one or more drugs that can be taken for acute and/or symptomatic treatment of headache1
- C. Not better accounted for by another ICHD-3 diagnosis.

Management

- Educate
- Consider prophylactic medication
- Provide an effective acute med for severe attacks with limitations on frequency of use
- Gradual withdrawal if opioid, or combination analgesic with opioid or barbiturate
- Abrupt (or gradual) withdrawal if acetaminophen, NSAIDs, or triptan

Headache hygiene

Simple Self-regulated Intervention Strategies*

- Apply a cold or hot back to the neck or head
- Tie something tight around the head
- Stretching and self-massaging the head and/or neck and shoulders
- Perform breathing exercises
- Visualization or other mindfulness-based exercises
- Go to a quiet place
- Lie down
- Go outside to get fresh air

* Note. When relevant, there are a variety of allied-health professionals who can guide individuals to perform appropriate home-based neck and shoulder stretching.

Self-Regulated Intervention and Lifestyle Strategies to Minimize Headache Occurrence

Lifestyle Strategy	Implementation
Sleep	• Go to bed and wake up at the same times • Avoid daytime napping
Regular Meals	• Do not skip breakfast, lunch or dinner • High protein meals are ideal
Hydration	• Consume 4-6 drinks per day of water, juice or milk • Avoid caffeine and diet soft drinks
Stress Management	• Implement relaxation strategies (e.g., meditation, yoga and exercise)
Exercise	• Following the initial rest period, avoid a sedentary lifestyle • Brisk walking, stationary biking, jogging or swimming are recommended

Tips and tricks

- Trillium EAP – enroll online, use Prescribe Smart app to look up which meds will be covered and which ones will need EAP
- Which triptans? (sumatriptan, rizatriptan)
- Which CGRP antagonists? Ajovy
- Onabotulinum toxin A?
- Make your patient do the work – headache questionnaire
- Consider working with a pharmacist or a company who can help you with paperwork

Choosing Wisely

Headache

Four Tests and Treatments to Question

Choosing Wisely Canada™

by
Canadian Headache Society
Last updated: July 2020

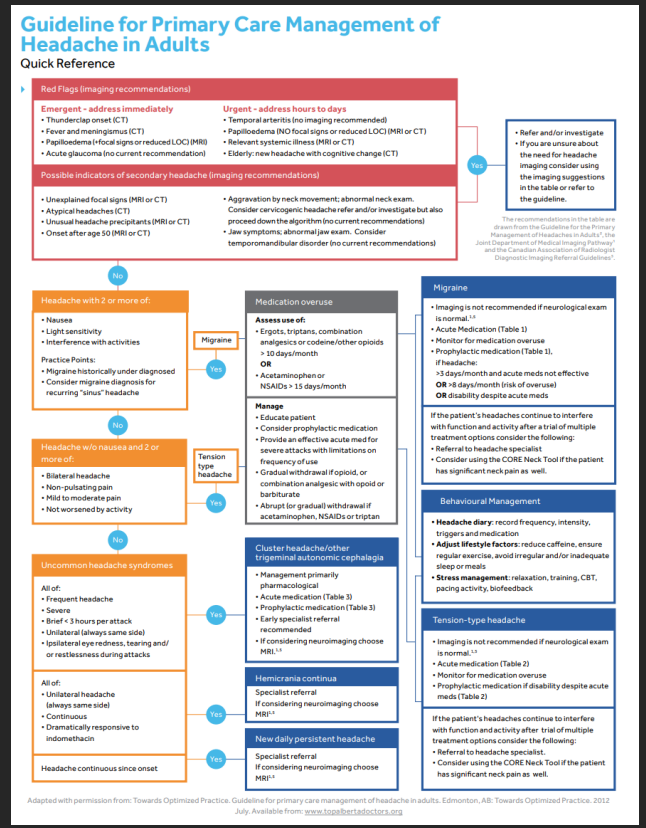
1. Don't order neuroimaging or sinus imaging in patients who have a normal clinical examination, who meet diagnostic criteria for episodic migraine, and have no "red flags" for a secondary headache disorder.

2. Don't prescribe opioid analgesics or combination analgesics containing opioids or barbiturates as first line therapy for the treatment of migraine.

3. Don't prescribe acute medications or recommend an over-the-counter analgesic for patients with frequent migraine attacks without monitoring frequency of acute medication use with a headache diary.

4. Don't forget to consider the behavioural components of migraine treatment, including lifestyle issues like regular and adequate meals and sleep, and management of specific triggers including stress.

Great resource is the CORE Neck Tool/Headache Navigator



Guideline for Primary Care Management of Headache in Adults

Quick Reference

Red Flags (imaging recommendations)

Emergent - address immediately
- Thunderclap onset (CT)
- Fever and meningismus (CT)
- Papilloedema (+focal signs or reduced LOC) (MRI)
- Acute glaucoma (no current recommendation)

Urgent - address hours to days
- Temporal arteritis (no imaging recommended)
- Papilloedema (NO focal signs or reduced LOC) (MRI or CT)
- Relevant systemic illness (MRI or CT)
- Elderly: new headache with cognitive change (CT)

Possible indicators of secondary headache (imaging recommendations)
- Unexplained focal signs (MRI or CT)
- Atypical headaches (CT)
- Unusual headache precipitants (MRI or CT)
- Onset after age 50 (MRI or CT)
- Aggravation by neck movement; abnormal neck exam. Consider cervicogenic headache refer and/or investigate but also proceed down the algorithm (no current recommendations)
- Jaw symptoms; abnormal jaw exam. Consider temporomandibular disorder (no current recommendations)

Yes → Refer and/or investigate
- If you are unsure about the need for headache imaging consider using the imaging suggestions in the table or refer to the guideline.

The recommendations in the table are drawn from the Guideline for the Primary Management of Headaches in Adults[1], the Joint Department of Medical Imaging Pathway[2] and the Canadian Association of Radiologist Diagnostic Imaging Referral Guidelines[3].

No

Headache with 2 or more of:
- Nausea
- Light sensitivity
- Interference with activities

Practice Points:
- Migraine historically under diagnosed
- Consider migraine diagnosis for recurring "sinus" headache

Migraine → Yes

Medication overuse

Assess use of:
- Ergots, triptans, combination analgesics or codeine/other opioids > 10 days/month

OR
- Acetaminophen or NSAIDs > 15 days/month

Manage
- Educate patient
- Consider prophylactic medication
- Provide an effective acute med for severe attacks with limitations on frequency of use
- Gradual withdrawal if opioid, or combination analgesic with opoid or barbiturate
- Abrupt (or gradual) withdrawal if acetaminophen, NSAIDs or triptan

No

Headache w/o nausea and 2 or more of:
- Bilateral headache
- Non-pulsating pain
- Mild to moderate pain
- Not worsened by activity

Tension type headache → Yes

No

Uncommon headache syndromes

All of:
- Frequent headache
- Severe
- Brief < 3 hours per attack
- Unilateral (always same side)
- Ipsilateral eye redness, tearing and/or restlessness during attacks

→ Yes

Cluster headache/other trigeminal autonomic cephalagia
- Management primarily pharmacological
- Acute medication (Table 3)
- Prophylactic medication (Table 3)
- Early specialist referral recommended
- If considering neuroimaging choose MRI[1,3]

All of:
- Unilateral headache (always same side)
- Continuous
- Dramatically responsive to indomethacin

→ Yes

Hemicrania continua

Specialist referral

If considering neuroimaging choose MRI[1,3]

Headache continuous since onset → Yes

New daily persistent headache

Specialist referral

If considering neuroimaging choose MRI[1,3]

Migraine
- Imaging is not recommended if neurological exam is normal.[1,3]
- Acute Medication (Table 1)
- Monitor for medication overuse
- Prophylactic medication (Table 1), if headache:
  >3 days/month and acute meds not effective
  OR >8 days/month (risk of overuse)
  OR disability despite acute meds

If the patient's headaches continue to interfere with function and activity after a trial of multiple treatment options consider the following:
- Referral to headache specialist
- Consider using the CORE Neck Tool if the patient has significant neck pain as well.

Behavioural Management
- **Headache diary**: record frequency, intensity, triggers and medication
- **Adjust lifestyle factors**: reduce caffeine, ensure regular exercise, avoid irregular and/or inadequate sleep or meals
- **Stress management**: relaxation, training, CBT, pacing activity, biofeedback

Tension-type headache
- Imaging is not recommended if neurological exam is normal.[1,3]
- Acute medication (Table 2)
- Monitor for medication overuse
- Prophylactic medication if disability despite acute meds (Table 2)

If the patient's headaches continue to interfere with function and activity after trial of multiple treatment options consider the following:
- Referral to headache specialist.
- Consider using the CORE Neck Tool if the patient has significant neck pain as well.

Adapted with permission from: Towards Optimized Practice. Guideline for primary care management of headache in adults. Edmonton, AB: Towards Optimized Practice. 2012 July. Available from: www.topalbertadoctors.org

https://cep.health/media/uploaded/CEP_HeadandNeck_2016_v15.2-1.pdf

References

- https://tools.cep.health/tool/core-neck-and-headache-navigator/
- Labastida-Ramírez et al. *The Journal of Headache and Pain* (2020) 21:55
- https://concussionsontario.org
- https://choosingwiselycanada.org/recommendation/headache/

Resources

Tools

Links to resources shared today will be sent to participants following the session.

Tools and Resources

Resource	Type	Link
Choosing Wisely Canada	Clinical Recommendations	https://choosingwiselycanada.org/recommendation/headache/
CORE Neck Tool/Headache Navigator	Clinical Guidelines	https://cep.health/media/uploaded/CEP_HeadandNeck_2016_v15.2-1.pdf
Concussion Ontario	Living Concussion Guidelines	https://concussionsontario.org/

Resources

Education

Links to resources shared today will be sent to participants following the session.

Practising Well CoP – Self Learning Program

The Practising Well CoP is now certified for self learning credits!

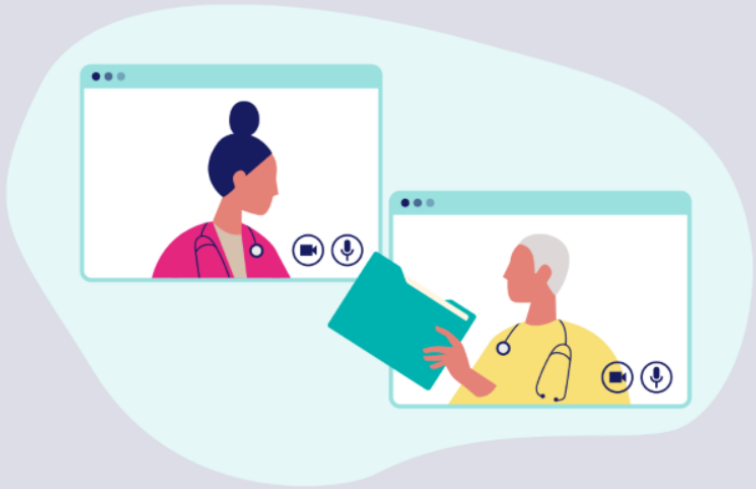
Earn **1-credit-per-hour** for reviewing the recording and resources from **past CoP sessions**. The self learning program is certified for up to 38 Mainpro+ credits.

For more information and to participate:

https://www.ontariofamilyphysicians.ca/supports-for-family-doctors/mental-health-and-addictions-supports/community-of-practice/practising-well-cop-self-learning-post-session-evaluation-survey/

Peer Connect

Enabling you to connect, share and learn from your fellow family physicians.



Mentorship Program - Connect with a Peer Guide!

An opportunity to partner with another family physician, **one-to-one or in a small group**, for support as you **explore clinical complexity and increase your confidence** caring for patients with mental health challenges, substance use, and chronic pain. A focus can be on your well-being as you engage in this challenging work.

https://www.ontariofamilyphysicians.ca/supports-for-family-doctors/mental-health-and-addictions-supports/peer-connect-mentorship/

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Supports

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Ontario College of Family Physicians

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Opening Keynote

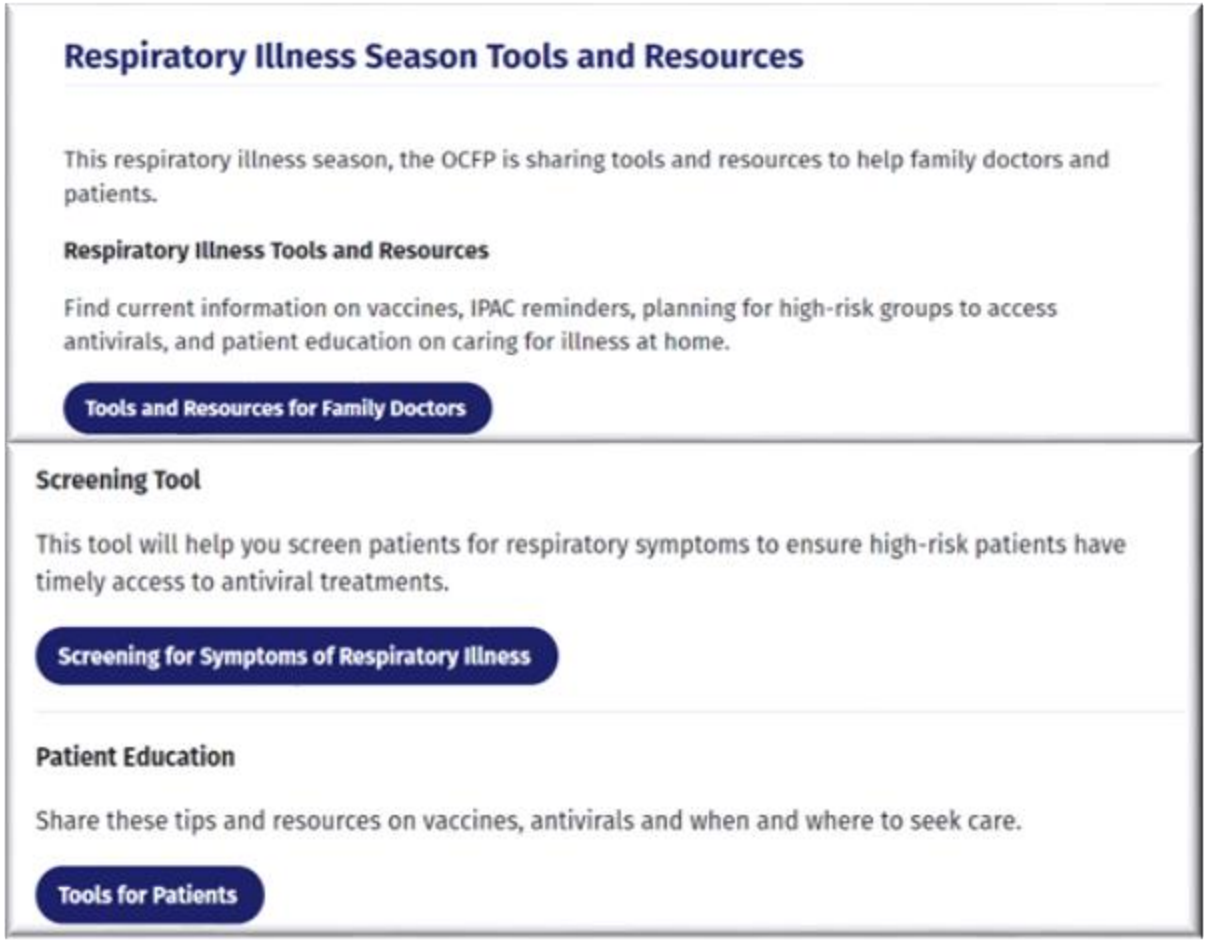
Dr. Hayley Wickenheiser

Family Physician Resident, Olympic Gold Medalist, Hockey Hall of Famer and Senior Director of Player Development for the Toronto Maple Leafs

Supporting Family Doctors Through Respiratory Illness Season

Ontario College of Family Physicians

https://www.ontariofamilyphysicians.ca/education-practice-supports/respiratory-illness-season-tools-and-resources



Resources

Supports

OMA Physician Health Program
https://php.oma.org

Centre for Addiction and Mental Health Health Care Provider (HCP) Resource Site
http://www.camh.ca/covid19hcw

CMA Wellness Hub
https://www.cma.ca/physician-wellness-hub

PARO

- PARO 24/7 Helpline for Residents, Family Members, Medical Students
- 1-866-HELP-DOC

Ontario

- https://www.ontario.ca/#support-health-care-worker
  - Self-led / With peers / Talk to a clinician
- Ontario Shores Centre for Mental Health Sciences, Whitby
- St. Joseph's Healthcare, Hamilton
- The Royal Ottawa Mental Health Centre, Ottawa
- Waypoint Centre for Mental Health Care, Penetanguishene
- Centre for Addictions and Mental Health (CAMH), Toronto

ECHO·ONMH
Project ECHO® Ontario Mental Health at CAMH & The University of Toronto

- ECHO Coping with COVID
  - for health providers (educational credits)
  - Fridays 2-3pm EST

https://camh.echoontario.ca/echo-coping-with-covid/

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with Drs. Chandi Chandrasena, Sarah Giles, and James Goertzen

December 13, 2023
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practisingwell@ocfp.on.ca

This one-credit-per-hour Group Learning program has been certified by the College of Family Physicians of Canada and the Ontario Chapter for up to 1 Mainpro+ credit. The Practising Well Community of Practice includes a series of planned live, interactive sessions. Each session is worth 1 Mainpro+ credits, for up to a total of 12 credits.