Provincial Giant Cell Arteritis Primary Care Clinical Pathway

Quick Links: Primer & Expanded details | Provider resources | Patient resources | Provide feedback

1. History

≥50-year-old patient presents with any of the following:

- Jaw claudication (pain in jaw brought on with prolonged chewing and alleviated by rest)
- Scalp tenderness
- Visual disturbance (blurred vision, diplopia, partial or complete field loss, uniocular concerns)
- New onset headache (lasting >24 hours, not relieved by over-the-counter meds)
- New onset limb claudication
- If patient also has Polymyalgia rheumatica symptoms (e.g. >1hr AM stiffness neck, bilateral shoulders, and/or hip stiffness/pain) this would increase suspicion of GCA.

2. Red Flag(s)

- *Vision loss or diplopia* - ***Call Ophthalmology for Advice and continue on the pathway***
- *Symptoms of Stroke* – ***Call 911***
- *Thunderclap headache, exertional headache or severe headache on anticoagulation* – ***Send to Emergency Department***

3. Assessment for GCA Differential Diagnosis

- Palpate temporal arteries for tenderness or reduced and/or asymmetrical pulse
- Palpate bilateral upper and lower pulses (radial/posterior tibial) for symmetry
- Bilateral brachial blood pressure
- Visual field testing
- Listen for bruits (carotid, subclavian, and femoral)
- Assess shoulders and hips for tenderness and range of motion to screen for PMR

4. Investigation(s)

- CRP STAT*

Also include non-stat:

- CBC, ALT, Creatinine

*If your clinical suspicion is moderate to high and CRP cannot be performed stat, consider sending patient to Emergency Dept.

5. Perform Southend GCA Probability Score

Guidance for completing the score:

- Under symptoms, *constitutional symptoms* include drenching night sweats, fever, and/or weight loss.
- *Ischemic symptoms* include to jaw claudication, unilateral diplopia, blurred vision or amaurosis fugax (transient monocular vision loss).

What was patient's risk of having GCA?

Low Risk

Intermediate or High Risk

6a. Primary Care Management:

GCA diagnosis extremely unlikely.

Consider Alternative Diagnoses and Resources:

- Headache & Migraine clinical pathway
- Shingles
- Dental caries (cavities) or abscess
- Trigeminal neuralgia
- Lower Limb Ischemia clinical pathway
- TMJ Dysfunction clinical pathway

6b. Call Rheumatology on call

and be prepared to start 40-60mg prednisone.

If put on prednisone, consider:

Prescribe a bisphosphonate (if not contraindicated) for osteoporosis prevention, order a BMD and calculate and manage CV risk.

Prescribe a PPI for gastric protection.

7. Non-Urgent Advice

If unsure at any time consult Rheumatology

Alberta Health Services

Call to Action: We need your feedback during this **new** pathway's initial testing phase!

Alberta's Pathway Hub | Background

This primary care pathway was co-designed provincially by Primary Care Providers, Specialist Physicians (Rheumatologists), Patient and Family Advisors, and the Alberta Health Services (AHS) Provincial Pathways Unit. It is intended to be used in conjunction with specialty advice services, when required, to support care within the medical home.

Primary care pathways are designed to help guide clinicians with appropriate procedures for patient management, investigation and referrals. The purpose of these pathways is to:

- *Support early diagnosis*
- *Appropriate use of investigations*
- *Facilitate access to and use of advice services*
- *Increase appropriateness of specialist referrals*

EXPANDED DETAILS

Pathway Primer

Giant cell arteritis (GCA) is the most common vasculitis in Canada and affects older adults with an estimated incidence of 25/100,00 and prevalence of 235/100,000 [1] [2]. GCA is a vision and life-threatening medical emergency [3] [4].

Clinical presentations are highly variable and delays to diagnosis are common. The systemic nature of GCA often requires multidisciplinary collaboration across medical, radiological, and surgical specialties. In Alberta, patients with GCA experience inconsistent care from the investigations they are sent for, to who they are referred to and the treatment regimens they are started on. This inconsistency in care is not aligned with the best-available evidence guiding practice of patients with suspected GCA.

1. History

Greater or equal to 50-year-old patient (greater probability with each decade of life) presents with any of the following symptoms:

- Jaw claudication (pain in jaw brought on with prolonged chewing and alleviated by rest)
- Scalp tenderness
- Visual disturbance (blurred vision, diplopia, partial or complete field loss, uniocular concerns)
- New onset headache (>24 hours, not relieved by over-the-counter meds)
- Polymyalgia rheumatica (symptoms include >1hr AM stiffness neck, bilateral shoulders, and/ or hip stiffness/pain)
- New onset limb peripheral claudication

2. Red Flag(s)

- Vision loss or diplopia – **Call Ophthalmology for Advice given that many differential diagnoses are possible but continue on the pathway if GCA is a concern**
- Symptoms of Stroke – **Call 911**
- Thunderclap headache, exertional headache or severe headache on anticoagulation – These headache presentations are concerning for intra-cranial hemorrhage – **Send to Emergency Department or call 911**

3. Assessment / Physical Exam

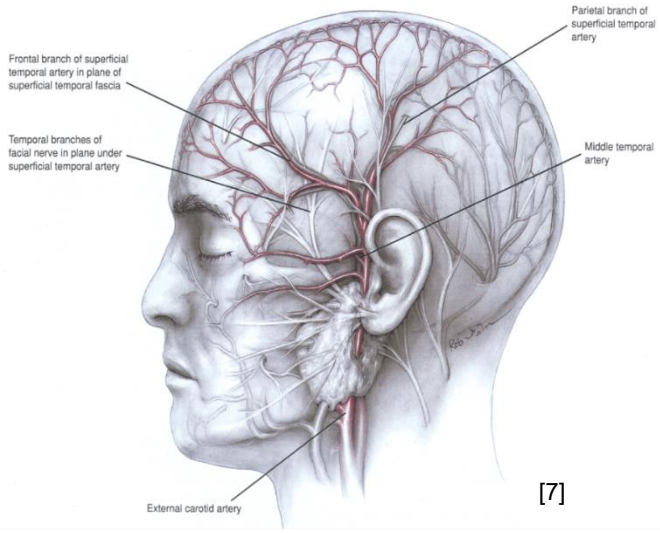
Palpate temporal arteries for tenderness or reduced and/or asymmetrical pulse.

Palpate bilateral upper and lower pulses (radial/posterior tibial) for presence and symmetry. Anything other than present, equal and palpable bilaterally is a concern.

Bilateral brachial blood pressure to assess for significant difference (greater than 10 mmHg systolic).

Visual field testing looking for defects.

Listening for bruits (carotid, subclavian, and femoral).



[7]

Shoulder and hip screen for PMR. This includes tenderness in proximal muscles of hips and/or shoulders, as well as painful range of movement often caused by bursitis.

4. Investigations

CRP STAT: CRP is essential to assess the patient's risk of having GCA.

If your clinical suspicion is moderate to high and CRP cannot be performed stat, consider sending patient to Emergency Department or Urgent Care.

When sending for bloodwork, also include non-stat:

CBC, ALT, Creatinine. This would help with identifying inflammation and for other potential causes of symptoms.

5. Perform Southend GCA Probability Score

Click Link: GCA Probability Score [5]

For completing the Southend GCA Probability Score, fill in each section as per patient's presentation.

Under symptoms, *constitutional symptoms* include drenching night sweats, fever, and/or weight loss. *Ischemic symptoms* include to jaw claudication, unilateral diplopia, blurred vision or amaurosis fugax (transient monocular vision loss).

For greater explanation of how the scoring is calculated for you, click here [6]**.**

6a. If Low Risk, GCA is unlikely to be present. Consider other differential diagnoses.

If applicable consider utilizing the following resources:

- Headache & Migraine pathway
- Lower limb ischemia pathway
- TMJ Dysfunction pathway

6b. If Intermediate/High Risk, Call rheumatologist on call via RAAPID.

Be prepared to start the patient on 40-60mg of prednisone (based on 1mg per kg) as emergent treatment is required due to the risk of vision loss or stroke if untreated.

Given the common side-effects of prednisone, patient education and prophylaxis for steroid related complications should be prioritized. This includes prescribing a bisphosphonate (if not contraindicated) for osteoporosis prevention, ordering a BMD, monitoring for diabetes, and calculating and managing CV risk factors. Prednisone can cause gastric ulcers, consider a proton pump inhibitor for gastric protection.

Patient education should include the risks of prednisone, but also the life/limb threatening nature of the condition and how prednisone is first-line treatment for GCA. Length of steroid use varies widely for each patient, but if GCA is present, a prolonged course of steroids (>3 months) is often required.

Alberta Referral Directory is also a helpful resource for all referral information.

7. Advice Options: Rheumatology

For Red flags: This patient needs to be directed to hospital through calling 911, calling RAAPID, or the Emergency Department.

Zone	Program	Online Request	Phone Number	Hours of operation	Anticipated Turnaround Time
Urgent Telephone Advice					
All Zones	RAAPID	N/A	**North:** 1-800-282-9911 780-735-0811 **South:** 1-800-661-1700 403-944-4486	**7 days per week** 24 hours	1 hour
Non-Urgent Telephone Advice					
Calgary	Specialist Link	Online Request	403-910-2551	**Mon - Fri** 8am – 5pm*	1 hour
Edmonton, North	ConnectMD	Online Request	1-844-633-2263	**Mon - Fri** 9am – 6pm*	2 business days

In addition to where specified in the clinical pathway algorithm, you can request non-urgent advice at any point when uncertain about medications, next steps in treatment, imaging, or resources available. *There are some exceptions to non-urgent telephone program hours of operation and exclusion

BACKGROUND

About this pathway

This pathway was developed in collaboration with rheumatologists, primary care physicians, patient and family advisors, and the Alberta Health Services (AHS) Provincial Pathways Unit.

Condition-specific clinical pathways are intended to offer evidence-based guidance to support primary care providers in caring for patients with a range of clinical conditions.

Authors and conflict of interest declaration

The authors represent a multi-disciplinary team. Additional review and expertise provided by a broader group. Membership available on request by emailing AlbertaPathways@ahs.ca.

Co-Design Team Project Membership	
Name and Designation/ Post Nominals	**Organization**
Dr. Cathryn J. Kuzyk, MD, CCFP, FCFP	Primary Care Physician
Dr. John Pasternak, MD	Primary Care Physician
Nick Clark	Patient and Family Advisor
Dr. Stephanie Garner, MD, MSc, FRCPC	Rheumatologist
Dr. Steven Thomson, MD FRCPC	Rheumatologist
Suzanne Teal	Patient and Family Advisor

Pathway review process, timelines

Primary care pathways undergo scheduled review every two to three years, or earlier if there is a clinically significant change in knowledge or practice. The next scheduled review is August 2026. However, we welcome feedback at any time. Please send us your feedback here.

Copyright information

DISCLAIMER

This pathway represents evidence-based best practice but does not override the individual responsibility of healthcare professionals to make decisions appropriate to their patients using their own clinical judgment given their patients' specific clinical conditions, in consultation with patients/alternate decision makers. The pathway is not a substitute for clinical judgment or advice of a qualified healthcare professional. It is expected that all users will seek advice of other appropriately qualified and regulated healthcare providers with any issues transcending their specific knowledge, scope of regulated practice or professional competence.

PROVIDER RESOURCES

Rheum Info	https://rheuminfo.com/
Rheum Tutor	www.rheumtutor.com/
Chronic pain centre	www.ahs.ca/findhealth/Service.aspx?serviceAtFacilityID=1098341
Treatment of GCA	www.uptodate.com/contents/treatment-of-giant-cell-arteritis

Clinical care checklist	
☐	Red Flags Cleared
☐	CRP ordered
☐	Southend Probability Score Performed
☐	If intermediate-high risk of GCA, prednisone started.

PATIENT RESOURCES

Patient Pathway on MyHealth Alberta > A webpage and two PDF formats are available to allow for easy printing, download, or scanning a QR code with the patient's smart phone for more information at their convenience.	https://myhealth.alberta.ca/HealthTopics/gca-pathway/Documents/gca-pathway-summary.pdf
MyHealth.Alberta – GCA	https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=abp6943
Rheumatology.org – GCA	https://rheumatology.org/patients/giant-cell-arteritis
Vasculitis Foundation	www.vasculitisfoundation.org/

REFERENCES

[1] L. Barra, J. Pope, F. Saxena, B. M., D. Haaland and e. al., "Incidence and prevalence of giant cell arteritis in Ontario, Canada," *Rheumatology ,* vol. 4, no. 3, pp. 239-50, 2020.

[2] K. Li, D. Semenov, M. Turk and J. Pope, "A meta-analysis of the epidemiology of giant cell arteritis across time and space," *Arthritis Res Ther,* vol. 23, 2021.

[3] K. Piggot, V. Biousee, N. Newman, J. Goronzy and C. Weyand, "Vascular damage in giant cell arteritis.," *Autoimmunity,* vol. 42, no. 7, pp. 596-604, 2009.

[4] J. Prior, H. Ranjbar, J. Belcher, S. Mackie, T. Helliwell, J. Liddle and e. al., "Diagnostic delay for giant cell arteritis - a systematic review and meta-analysis," *BMC,* vol. 15(1):120, 2017.

[5] RheumCalc., "GCA Probability Score," [Online]. Available: https://rheumcalc.com/gca-probability-score/. [Accessed 13 08 2024].

[6] A. Sebastian, A. Tomelleri, A. Kayani, D. Prieto-Pena, C. Ranasinghe and B. Dasguptua, "Probability-based algorithm usingultrasound and additional tests forsuspected GCA in a fast-track clinic," *RMD Open,* p. 6:e001297, 2020.

[7] M. Eskridge and N. Perrior, "Temporal Artery Biopsy," *Operative Techniques in General Surgery,* vol. 4, no. 3, pp. 239-50, 2002.