

## **1. Introduction**

GCA is the commonest of all the vasculitides. Sight loss occurs in up to one-fifth of patients, which may be preventable by prompt recognition and treatment. The purpose of this guideline is to encourage the prompt diagnosis and management of GCA, with emphasis on the prevention of visual loss. The scope is to provide a useful evidence-based algorithm for the assessment and diagnosis of GCA, for initial and further management and for monitoring of disease activity, complications and relapse.

## **2. Scope**

This guideline applies to all clinicians who see patients with suspected GCA/temporal arteritis.

## **3. Recommendations**

The recommendations for the guidelines are set out in points 1 to 9

- (1) Early recognition and diagnosis of GCA is paramount. Particular attention should be paid to the predictive features of ischaemic neuro-ophthalmic complications
- (2) Urgent referral for specialist evaluation is suggested for all patients with GCA. Temporal artery biopsy (TAB) should be considered whenever a diagnosis of GCA is suspected. This should not delay the prompt institution of high-dose gluco-corticosteroid therapy. The need for a temporal artery biopsy will be decided by the reviewing specialist. The TAB procedure will be performed by the Ophthalmology team, usually taken from the symptomatic side. This will be performed at the next available allocated theatre space.
- (3) Imaging techniques show promise for the diagnosis and monitoring of GCA. However, these do not replace TAB for cranial GCA. Their role in early diagnosis of cranial GCA is an important area of ongoing and future research.
- (4) High-dose glucocorticosteroid therapy should be initiated immediately when clinical suspicion of GCA is raised.
- (5) Glucocorticosteroid reduction should be considered only in the absence of clinical symptoms, signs and laboratory abnormalities suggestive of active disease.
- (6) Large-vessel GCA should be suspected in patients with prominent systemic symptoms, limb claudication or persistently high-inflammatory markers despite adequate glucocorticosteroid therapy. Imaging techniques, such as PET and MRI scanning, should be reserved for the assessment of suspected large-vessel involvement.
- (7) Monitoring of therapy should be clinical and supported by the measurement of inflammatory markers.
- (8) The early introduction of biologic therapy should be considered in refractory or relapsing cases and use of alternative immunosuppressants should be considered as maintenance therapy as per NHS England guidance.
- (9) The continued use of patient education during treatment.

**Figure 1: Approach to diagnosis and management of GCA/Temporal arteritis**

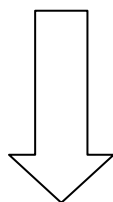
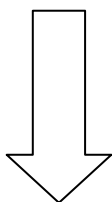
**Key Features in patients > 50 years with raised inflammatory markers only**

- Abrupt onset of new localised temporal headache
- Jaw claudication (high risk)
- New visual symptoms (high risk)
- Scalp pain & scalp tenderness

If one of the above 4 features are present in patients, start immediate steroid treatment as below (once bloods sent off).

*There should be no delay in the case of patients with high risk symptoms*

- Loss of vision, intermittent blurring or double vision*
- Jaw claudication*

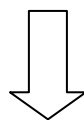
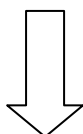


**Uncomplicated ;  
No jaw claudication or visual symptoms**

- Prednisolone 40mg OD**
- Consider gastric & bone protection

**Complicated:  
Jaw claudication or visual symptoms**

- Prednisolone 60mg OD**
- Consider gastric & bone protection



***Refer to rheumatology in all cases of GCA without visual symptoms:***

Via on-call Rheumatology registrar through Switchboard.  
Internal referral for biopsy or Temporal artery Ultrasound will be made by rheumatology if required.

***Refer to ophthalmology urgently if patient has visual symptoms:***

Via Eye Emergency Dept or on-call ophthalmology registrar. Out of hours referral can be made to Rheumatology Team via calling switchboard.

## **Rheumatology On-Call Team Guidelines for Ultrasound temporal arteries or Temporal artery biopsy referral (TAB)**

Consider USS temporal artery or TAB if the patient fulfils the following criteria:

1. Age > 55
2. Jaw claudication
3. Raised inflammatory markers (*raised CRP, or plasma viscosity or ESR. The CRP is elevated in nearly all cases of GCA*)
4. Other causes of symptoms excluded (shingles, trigeminal neuralgia, cervical spondylosis etc)

**GCA is highly unlikely if the following features are present:**

1. Normal Plasma viscosity and C-Reactive protein even if patient has headaches. (consider alternative diagnosis)
2. Age < 50 years
3. Obvious source of infection in a patient with headaches.

### **4. Monitoring and Audit Criteria**

All guidelines should include key performance indicators or audit criteria for auditing compliance,

<b>Key Performance Indicator</b>	<b>Method of Assessment</b>	<b>Frequency</b>	<b>Lead</b>
Review of the GCA referral pathway	Periodic auditing of referral pathway	Annual to 2-yearly	Dr Kenny Sunmboye

### **5. Supporting Documents and Key References**

1. Sarah L Mackie, et al. British Society for Rheumatology guideline on diagnosis and treatment of giant cell arteritis, *Rheumatology*, Volume 59, Issue 3, March 2020, Pages e1–e23.
2. Mukhtyar C, Guillevin L, Cid MC et al. EULAR Recommendations for the management of large vessel vasculitis. *Ann Rheum Dis* 2009;68:318–23.
3. Borg FA, Salter VLJ, Dasgupta B. Neuro-ophthalmic complications in giant cell arteritis. *Curr Allergy Asthma Rep* 2008;8:323–30.
4. Smetana GW, Shmerling RH. Does this patient have temporal arteritis? *JAMA* 2002;287:92–101.
5. Makkuni D, Bharadwaj A, Wolfe K, Payne S, Hutchings A, Dasgupta B. Is intimal hyperplasia a marker of neuro-ophthalmic complications in Giant cell arteritis? *Rheumatology* 2008;47:488–90.
6. Nuenninghoff DM, Hunder GG, Christianson TJH et al. Incidence and predictors of large-artery complication (aortic aneurysm, aortic dissection, and/or large-artery stenosis) in patients with giant cell arteritis. *Arthritis Rheum* 2003;48:3522–31.

### **6. Key Words**

Giant-cell arteritis, Temporal arteritis, temporal artery biopsy

This table is used to track the development and approval and dissemination of the document and any changes made on revised / reviewed versions

<b>DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT</b>			
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