Version 2.0

Temporal Arteritis or Giant Cell (Cranial) Arteritis

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Introduction

Systemic, inflammatory, vascular syndrome that predominantly affects cranial arteries.

Risk Factors

- Polymyalgia rheumatica (PMR) if European, and a ↓incidence in African Americans.
- 2F:1M
- Increasing age, peak 60-80 years.
- Genetic factors: PMR and GCA may aggregate in families.

Presentation

Diagnostic criteria (sens 97%, spec 79%) for temporal arteritis are 3 from:

- Age >50y
- New-onset localized headache
- Abnormalities of the temporal arteries – tenderness or decreased pulse
- ESR >50 mm/hr
- Positive temporal artery biopsy

Symptoms

- Headache (>85%) or exquisite scalp tenderness. Recent onset, temporal or occipital.
- Jaw claudication (>50%)
- Visual disturbances (~50%) e.g. If untreated, 2nd eye may be affected within 1-2wks.
- Systemic symptoms: (similar to PMR) proximal stiffness, pain, anorexia, wt loss, fever, sweats, malaise, fatigue and depression.
- Thoracic aorta and aortic root involvement: (~15%). Female & younger patients.

Signs

- Visual loss & fundoscopic changes.
- Temporal arteries may be prominent, beaded, tender, pulseless; or normal.
- Bruits over the carotid, axillary, or brachial arteries.
- Fever, tender muscles/joints

Differential Diagnosis

- Migraine
- Tension headache
- Trigeminal neuralgia
- Takayasu's arteritis
- Polyarteritis nodosa
- Polymyositis

Investigations

- FBC (normchromic anaemia, ↑plt), ESR, CRP, LFT (±↑ALP)
- Temporal artery biopsy is gold standard (60-80% accurate as may be skip lesions).
- USS: Colour duplex temporal art (95% NPV). Thoracic/abdominal for aortic aneurysms.

Management

- **Prednisone** 40-80mg/d PO. IV **methylprednisolone** is often used if acute visual changes
- Relapse is common (25-60%) esp. in the first year of treatment
- **Methotrexate** or TNF antagonists have been used to treat resistant patients.

Prognosis

- Visual damage is often irreversible. Partial or complete vision loss in ~15-20%
- The average duration of treatment is 2 years
- Poor prognostic factors: older age at Dx, F, higher baseline ESR, & initial rapid ↓pred dose.