



Cast 35 – Vision Loss

70 year old man presents with painless loss of vision in the right eye.

(a) List 6 causes of Painless Vision Loss. (6 marks)

Underlined + 3 others out of below

- Vitreous Haemorrhage
- Retinal Detachment
- Central Retinal Artery Occlusion (CRAO)
- Central Retinal Vein Occlusion (CRVO)
- Amaurosis Fugax
- Internal Carotid Artery Occlusion / Embolic
- Methanol Poisoning
- Giant Cell Arteritis (GCA)**

(b) List 6 causes of Painful Vision Loss. (6 marks)

This question also alternatively may be framed as “....non-traumatic painful vision loss.”

- Acute Closed Angle Glaucoma
- Uveitis
- Endophthalmitis
- Keratoconus
- Retinal Migraine
- Optic Neuritis
- Giant Cell Arteritis (GCA)**
- Traumatic Hyphaema
- Traumatic Iritis
- Traumatic Cataract
- Globe Rupture

• *GCA may be listed under both categories*



His fundoscopic examination is shown below



(c) Describe and interpret his fundoscopic findings.

- Swollen / Oedematous Optic disc
- Retinal Haemorrhages
- Anterior Ischaemic Optic Neuropathy (Alternatively use fundal height above umbilicus)

(d) His key pathology results are given below.

Hb: 154
WCC: 9.3
Platelets: 513
ESR: 36
CRP: 84

- i. State the most likely diagnosis for loss of vision for this patient (1 Mark)
- ii. Describe immediate treatment & ongoing management. (2 Marks)

- **Diagnosis:** Giant Cell Arteritis
- **Immediate Treatment:** High-dose IV methyprednisolone initially 250 mg IV q6h for 72 hours
- **Ongoing management:** Oral prednisolone ~ 1mg/kg until GCA ruled out, or until symptoms improve and ESR normalises — then a reducing dose over 6-12+ months is commonly used.



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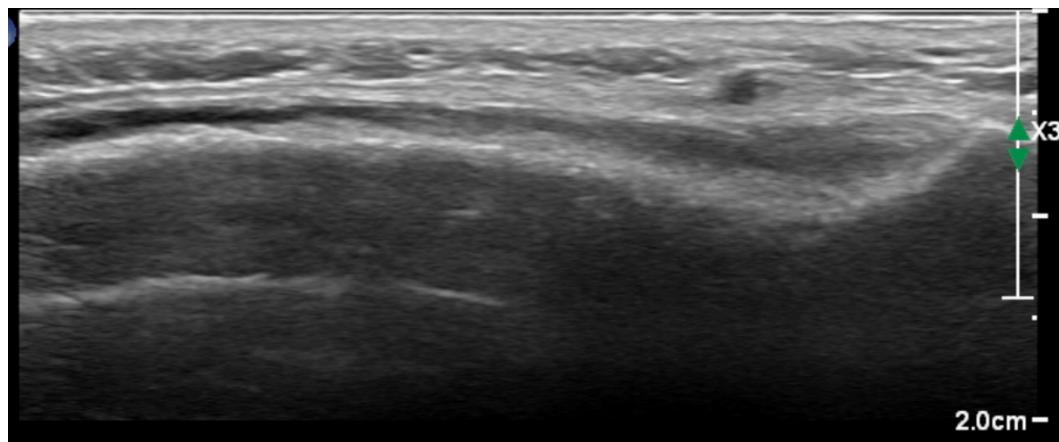
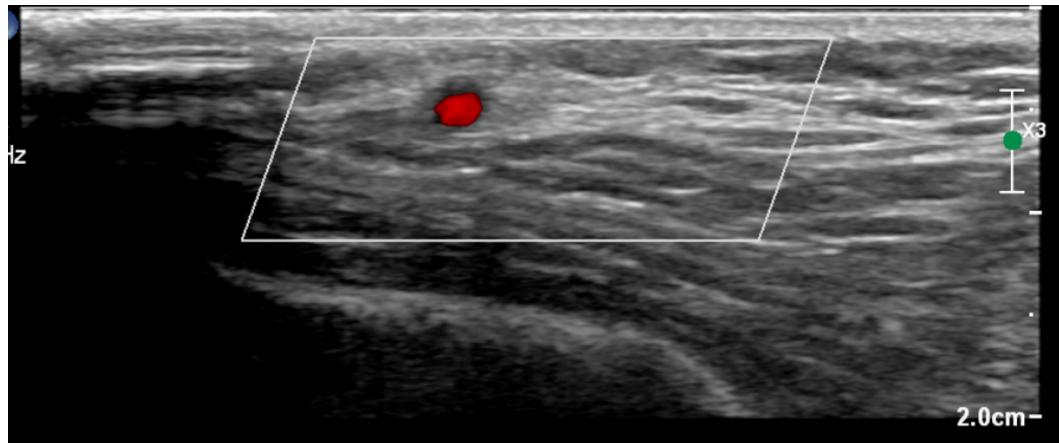
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(<https://www.sciencedirect.com/science/article/pii/S1319453414001167>)

Actual Patient Case Images



TEMPORAL ARTERY DOPPLER

Clinical Indications:

Report:

The right temporal artery is abnormal characterised by moderate hypoechoic circumferential wall thickening. Tortuous course of the main superficial temporal artery proximally. Normal appearance of the frontal and parietal branches.

The left temporal artery is abnormal characterised by circumferential hypoechoic wall thickening of the main superficial temporal artery proximally. Normal appearance of the frontal and parietal branches.

Conclusion:

Bilateral thickened, hypoechoic wall of the main superficial temporal artery. Tortuous course of right main superficial temporal artery. ?
Giant Cell Arteritis.