Ocular Manifestations in a Giant Cell Arteritis Cohort

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Key Message:

The incidence of visual involvement in an integrated ophthalmology and rheumatology GCA service in a tertiary centre in Norwich is 29%.

2% of people with GCA have visual loss as the sole presenting feature.

Introduction

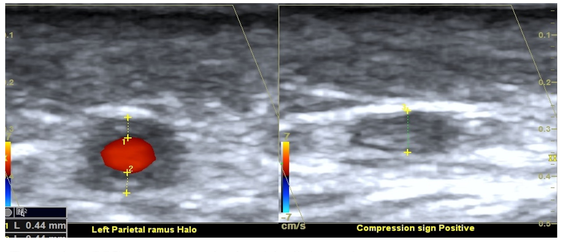
- The ophthalmic features of giant cell arteritis involve a spectrum of severity from transient symptoms to bilateral complete blindness
- Data of reported ocular involvement is varied with a range of 10-70% and variation may be related to the speciality of the unit reporting the data[1,2]
- We run an interdisciplinary service in a tertiary academic unit and report a complete picture of the frequency and nature of ocular involvement in GCA.

Methods

- The records of 350 consecutive patients diagnosed objectively on the basis of biopsy or imaging were reviewed.
- In our centre, the hospital pathway mandates all individuals with suspected GCA with visual symptoms to have a formal ophthalmology assessment.

Results

- 350 consecutive patients objectively diagnosed with GCA
- All patients with visual symptoms receive a formal ophthalmology assessment including visual acuity, pupil exam and full dilated fundus assessment.
- A structured form used to record symptoms, signs and ophthalmology assessment
- 29% of patients had ocular symptoms table 1.



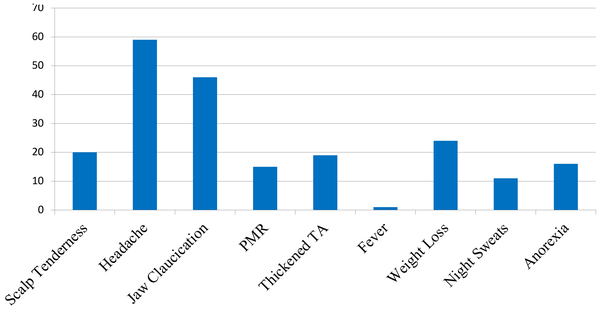
Doppler US showing halo (left) and compression signs (right) in a patient with GCA

Results (Cont'd)

Table 1 Visual Symptoms and Signs in a cohort of 350 consecutively diagnosed GCA from 2012-2021.

Visual Symptoms	101
Blurred Vision	36
Loss of vision	47
Double Vision	27
Ocular Signs	
Right CRAO[1]	1
Left CRAO[1]	10
Right AION[2]	19
Left AION[2]	23
Right extraocular muscle weakness	6
Left extraocular muscle weakness	4

1 Central retinal artery occlusion 2 Anterior ischaemic optic neuropathy



Conclusion

- We report the frequency of visual involvement in one of the largest cohorts of individuals with GCA.
- 29% have ocular symptoms
- Partial or total field loss occurred in 13% of cases. 2% of patients may be presenting with visual symptoms as the only sign of GCA.

References

1. Saleh M, Turesson C, Englund M, Merkel PA, Mohammad AJ. Visual Complications in Patients with Biopsy-proven Giant Cell Arteritis: A Population-based Study. J Rheumatol. 2016;43(8):1559–65.
2. Dammacco R, Alessio G, Giancipoli E, Leone P, Cirulli A, Resta L, et al. Giant Cell Arteritis: The Experience of Two Collaborative Referral Centers and an Overview of Disease Pathogenesis and Therapeutic Advancements. Clin Ophthalmol. 2020;14:775–93.

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