A comparison of giant cell arteritis referrals and outcomes during the COVID-19 pandemic: experience from a district general hospital in the UK

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Table 1. Giant cell arteritis referrals and outcomes before and during the COVID-19 pandemic

Year	2019	2020
Total number of new rheumatology patients, n	744*	717*
Total number of suspected GCA referrals, n (%)	22 (0.03)*	15 (0.02)*
Female, n (%)	16 (73)	9 (60)
White – British, n (%)	19 (86)	9 (60)
Age, years, median (range)	69 (50-87)	71 (40-85)
The number of GCA referrals from GP, n (%)	14 (63)	9 (60)
The number of referrals which stated GCA symptoms as either a positive or negative finding, n (%):		
i. Polymyalgia rheumatica	7 (32)	7 (47)
ii. Jaw claudication	13 (59)*	10 (67)*
iii. Headaches	19 (86)	12 (80)
iv. Scalp tenderness	16 (73)	12 (80)
v. Visual symptoms	18 (82)*	13 (87)*
The number of referrals which included blood results, n (%)	19 (86)*	12 (80)*
The number of referrals which stated the results of inflammatory markers, n (%):		
i. C-reactive protein (CRP)	15 (68)*	7 (47)*
ii. Erythrocyte sedimentation rate (ESR)	19 (86)*	10 (67)*
iii. Both CRP and ESR	15 (68)	5 (33)
The number of referrals which stated the start date of prednisolone, n (%)	17 (77)	9 (60)
The number of patients commenced on appropriate prednisolone dose; 60 mg (with visual symptoms) or 40 mg (without), n (%)	11 (50)*	9 (60)*
The number of patients who had a PPI (proton pump inhibitor) prescribed, n (%)	20 (91)	14 (93)
The number of patients who had calcium/vitamin D tablets prescribed, n (%)	8 (36)*	7 (47)*
The interval between the date of referral and the first rheumatology appointment, days, range (median)	2–103 (34)*	2–161 (13)*
The number of patients in which a decision was made to continue with steroids following the first appointment, n (%)	10 (45)*	7 (47)*

Introduction

Patients with giant cell arteritis (GCA) often require a long duration of steroid therapy. Therefore, steroids should only be commenced when the diagnosis is highly suspected, following a thorough history and blood results to match. Equally, the availability of fast-track pathways will prevent the long-term steroid burden for patients who do not have GCA. Our department's fast-track pathway is still in development, and we aimed to assess the quality of GCA referrals and their outcomes before and during the first wave of the COVID-19 pandemic.

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Methods

We retrospectively reviewed all case notes of GCA referrals between 1 April and 30 September in 2019 and 2020. The referral letters were assessed for the inclusion of GCA symptoms, the blood results and the treatments prescribed. The clinic letters were reviewed to determine the interval between patient referral and rheumatology appointment and the outcome, which was the decision to continue or stop the prednisolone.

Results

As illustrated in Table 1, the number of new patients and the proportion of GCA referrals were similar. Interestingly, we found many similarities between these two periods.

In terms of the inclusion of GCA symptoms as either a positive or negative finding, jaw claudication was the second least mentioned symptom despite being the most specific for GCA.[1] Moreover, not all referral letters commented on visual symptoms despite irreversible blindness being one of the major complications.[2] In terms of blood results, less than 90% of referral letters included the results of inflammatory markers and erythrocyte sedimentation rate was favoured over C-reactive protein. Less than two-thirds of patients were commenced on the appropriate prednisolone dose and most patients were not started on calcium/vitamin D tablets.

We also found significant delays in both periods, with the interval exceeding 3 months between patient referral and rheumatology review. Finally, the proportion of patients who had their steroids discontinued following their first rheumatology appointment was more than 50%.

Conclusion

Our findings suggest a minimal effect of the COVID-19 pandemic on the quality and quantity of GCA referrals to our hospital. The constant variable was the lack of a fast-track assessment pathway. Our perspective as a district hospital is reflective of other UK hospitals that do not yet have fast-track pathways. Furthermore, only six out of 16 sites (37.5%) in our region, north-west England, have GCA fast-track pathways in place.[3]

These findings highlight the importance of improving awareness on the management of GCA. Our recommendations include using a GCA-specific referral template to improve the quality of referrals (Fig 1), promoting the use of the British Society for Rheumatology guideline and encouraging other rheumatology departments to develop or improve their GCA fast-track assessment pathways.[2] This report led to the startling revelation that the issues identified from these results did not arise from the COVID-19 pandemic but rather from other factors that existed prior to and persisted through it.

GCA Referral Form

NHS number: _____

Date of birth: _____ Sex: M/F

Ethnicity: _____

Co-morbidities:

Diabetes ☐ Osteoporosis/osteopenia ☐

Hypertension ☐ Gastroesophageal reflux disease ☐

When did the symptoms start? (please provide exact date if possible)

_____

Date patient seen: _____

Symptoms:

Jaw claudication ☐ Visual symptoms ☐ PMR symptoms ☐

Headache ☐ Scalp tenderness ☐

Bloods requested:

CRP ☐ ESR ☐ FBC ☐ LFT ☐

Others: _____

Was the patient referred to Opthalmology? YES/NO

Did you contact Rheumatology for advice? YES/NO

Did you request for temporal artery biopsy? YES/NO

Did you request for USS? YES/NO

What was the date steroids were commenced? _____

What was the dose? _____

Was the patient commenced on PPI? YES/NO

Was the patient commenced on Calcium and Vitamin D? YES/NO

Date of referral to Rheumatology: _____

Fig 1. Referral pro forma.

References

1 Mehta P, Sattui SE, van der Geest KSM *et al.* Giant cell arteritis and COVID-19: similarities and discriminators. A systematic literature review. *J Rheumatol* 2021;48:1053–59.

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3 Sharp CA, Little J, Shahbaz A *et al.* P013 Driving improvement through audit: impact of 2017 regional audit and survey upon giant cell arteritis services in 2020. *Rheumatology (Oxford)* 2021;60(Supplement 1):keab247.012.