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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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.

Methods

We retrospectively reviewed all case notes of GCA referrals between 1st April to 30th 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 to 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. For both periods, most of the patients seen are female and white with a similar median age.

	2019	2020
Number of new patients	744	717
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 in years, median (range)	69 (50-87)	71 (40-85)

Table 1: The number of referrals and demographics

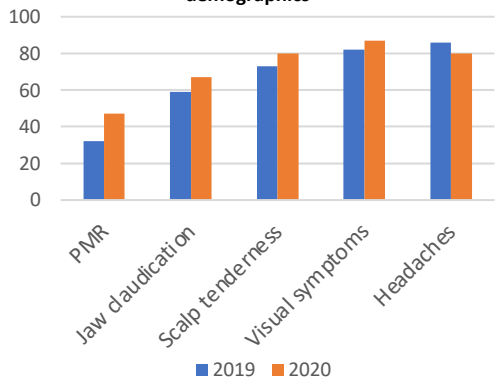

Figure 1: The percentage of referrals which stated GCA symptoms as either a positive or negative finding in 2019 (n=22) and 2020 (n=15)

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. Moreover, not all referral letters commented on visual symptoms despite irreversible blindness being one of the major complications.

	2019	2020
Referrals with inflammatory markers, n (%)	19 (86%)*	12 (80%)*
Referrals which mentioned the prednisolone start date, n (%)	17 (77%)	9 (60%)
Total number of patients commenced on appropriate prednisolone dose; 60mg (with visual symptoms) or 40mg (without), n (%)	11 (50%)*	9 (60%)*
Total number of patients who had PPI (proton pump inhibitor) prescribed, n (%)	20 (91%)	14 (93%)
Total number of patients who had Calcium/Vitamin D tablets prescribed, n (%)	8 (36%)*	7 (47%)*

Table 2: The number of referrals which included blood results, prednisolone start date, doses of prednisolone and prescription of gastroprotective and bone protection medications

In terms of blood results, less than 90% of referral letters included the results of inflammatory markers. 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 (**Table 3**), with the interval exceeding three months, between patient referral to rheumatology review. Finally, the number of patients who had their steroids discontinued were more than 50% following their first rheumatology appointment.

	2019	2020
The interval between the date of referral and the first rheumatology appointment in days, range (median)	2-103 (34)	2-161 (13)
The number of patients in which a decision was made to continue with steroids, n (%)	10 (45%)	7 (47%)

Table 3: Outcomes of the GCA referrals

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. 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, promoting the use of the British Society for Rheumatology guideline and encouraging other departments to develop GCA fast-track pathways. This report led to a startling revelation whereby 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.

The effect of the COVID-19 pandemic on the GCA referrals and outcomes was minimal. The constant variable was the lack of a fast-track assessment pathway.