SUMMARY

In 2015, University Hospital Coventry and Warwickshire (UHCW) NHS Trust implemented a Fast-Track Giant Cell Arteritis (GCA) Pathway, streamlining the process for management of GCA. The new pathway uses walk-in vascular Doppler ultrasound, allowing same-day diagnoses and treatment initiation for patients with suspected GCA.

THE CHALLENGE

• GCA and the associated irreversible visual impairment, impacts substantial burden on health and social care costs, including management of important care and steroid-related adverse events.1

• The British Society for Rheumatology (BSR) GCA guidelines emphasise the importance of prompt recognition and management of GCA to assure a diagnosis, prevent vision loss and to prevent unnecessary treatment for GCA-negative patients.2

THE SOLUTION

• UHCW NHS Trust implemented a fast-track pathway (FTP) in 2013 to assess all patients with suspected GCA.

• The FTP enables all patients >50 years of age and presenting ≥2 key features of GCA to receive immediate vascular Doppler ultrasound whilst steroid-naïve (Figure 1).

• Temporal artery biopsy (TAB) remains the recommended investigation of GCA symptoms, however, modern imaging techniques such as ultrasound, a quick and non-invasive procedure, show promise for diagnosis and monitoring of GCA.

Following assessment via the Fast-Track GCA Pathway (Figure 1):

• Ultrasound positive patients are immediately treated for GCA with steroids.

• Ultrasound negative patients with moderate/high suspicion of GCA are administered steroids and referred for a TAB within two weeks.

• Ultrasound negative patients with low suspicion of GCA are reassured and discharged, and undergo rapid steroid tapering if they had been receiving treatment.

SERVICE AND FINANCIAL PERFORMANCE OUTCOMES

Service Outcomes

• The sequential diagnostic approach for ultrasound negative, GCA high risk patients has substantially reduced the requirement for vascular and ophthalmology departments to carry out biopsies.

Clinical Outcomes

• Since 2014, 70% (267/373) of patients received an ultrasound scan on the same day as presenting with their initial symptoms, whilst steroid-naïve.

• The immediate same-day nature of the GP referral, ultrasound, and steroid prescription ensures a highly efficient diagnosis for a condition which is often considered a medical emergency.

• Prescription of steroids after diagnosis avoids unnecessary medication exposure for GCA-negative patients.

• Successful implementation of GCA FTPs in other NHS trusts (Southend University Hospital NHS Trust3) and globally (Hospital of Southern Norway Trust Kristiansand) has been reported, demonstrating how a similar service could be effectively rolled out to other centres.

• The possibility to perform urgent vascular Doppler ultrasound is already available in many NHS Trusts through the emergency service for transient ischaemic attack/stroke patients. Although the service would require additional training and negotiations regarding time commitment of departments, many Trusts would already be fully equipped with the facilities to provide the UHCW’s FTP for GCA diagnosis.

PATIENT FOCUS AND SATISFACTION

• Through streamlining diagnosis, treatment of potential GCA, and treating it as a medical emergency, the FTP has ensured that GCA- positive patients receive immediate diagnosis and initiation of treatment (100% [14/14] strongly agreed that ‘Treatment for GCA was initiated promptly’), and GCA-negative patients do not receive unnecessary steroids.

• The service ensures that high quality, year-round ultrasound and TAB services are provided to patients.

• In a survey of the FTP, 100% (25/25) of patients either ‘agreed’ or ‘strongly agreed’ that they were happy with the standard of care for this service.

• A GCA patient support group has been recently set-up, which retains strong links with UHCW, and patients within this group who have been treated through the FTP have been ‘amazed’ at the time from initial symptom presentation at their GP appointment to diagnosis.

Patients conveyed their appreciation of the efficient and friendly nature of the service and commended the collaborative approach between departments involved.

• ‘Amazed at how well I was treated, everything was so quick & prompt which eased nerves. Staff were all exceptional, (absolutely) lovely’.

• ‘Excellent, very prompt service. Great patient care’.

• ‘Seen within 4 hours, much better than separate appointents.

• References


Figure 1. Fast-Track Giant Cell Arteritis Pathway with Walk-In Ultrasound

- The use of ultrasound in diagnosing patients with suspected GCA, was more cost-effective than TAB.

- The sequential diagnostic approach represents a cost saving of £427/patient when compared to TAB alone (largely due to the lower cost and higher sensitivity of ultrasound).