Conclusion: This study demonstrates that circulating B cells of patients with GCA have the capacity to express pro-inflammatory cytokines (IL6 and TNF α) which can influence other cellular players in GCA. Specifically, B cell secreted soluble factors were able to skew macrophages towards a pro-inflammatory phenotype. In addition, this study provides evidence for an active role of B cells in shaping the cytokine milieu at the site of inflammation thereby revealing the B cell as a new target of intervention in GCA.

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OP0063

SINGLE CENTRE EXPERIENCE OF THE CLINICAL SPECTRUM, AETIOLOGIES AND MANAGEMENT OF NON-INFECTIOUS AORTITIS

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Background: Aortitis, a rare form of large vessel vasculitis, may occur in the context of a primary systemic vasculitis, as a part of systemic autoimmune disease or in isolation. The evidence and guidelines to diagnose, manage and monitor aortitis remain limited. However, PET CT and vascular MRI scans have facilitated our ability to make the diagnosis more readily. The optimal management strategy and complication rates remain uncertain.

Objectives: Our aim was to explore the clinical, laboratory and radiological features of aortitis. We sought to review the management and complications of this illness by collecting detailed information on the outcomes and treatments used, including disease modifying agents (DMARDs) and biologics.

Methods: Patients diagnosed with aortitis since 2006 that had been managed in a single tertiary centre were identified using the Rheumatology Assessment Database Innovation in Oxford (RHADIO). Their medical notes were retrospectively reviewed using a local electronic patient record system and the following information was obtained: demographics, underlying risk factors, imaging and laboratory results (including biopsy reports if available), management and outcome.

Results: We identified 155 patients who met the inclusion criteria. There was a female preponderance of 57.4% (n=89). At the time of diagnosis, the average age was 69 (range 30-92) and the mean symptomatology length prior to diagnosis was 12 months (range 0-120). The majority of patients (60.4%, n=94) had aortitis secondary to giant cell arteritis (GCA), isolated aortitis was identified in 29.7% (n=46) and IgG4-related disease aortitis was uncommon (2.6%, n=4). Those with cranial GCA-like symptoms were diagnosed on average 3.9 months before those who presented differently (10.1 months versus 14.0 months).

Common presentations comprised: systemic inflammatory response syndrome (49.0%, n=76), cranial GCA-like symptoms (26.5%, n=41) and unexplained weight loss (24.5%, n=38). Importantly, 18.7% (n=29) of patients presented with ischaemic symptoms that included angina, TIAs/strokes and claudication. Aortic dissection was the primary presentation for 6.5% (n=10) of patients.

At presentation, the mean CRP was 84mg/L (range 1-249) and the ESR was 72mm/hr (range 2-164). Most (73.5%, n=114) had diagnostic PET CT changes. For those patients with GCA, diagnostic ultrasound changes were seen in 27.7% (n=26).

Nearly all were treated with prednisolone (92.3%, n=143) and all but 8 (5.1%) received a DMARD at some point. Methotrexate was the most commonly used DMARD (93.9%, n=138), followed by leflunomide (22.3%, n=35) and azathioprine (19.1%, n=28). Cyclophosphamide was used in 23.8% of patients (n=38) and 15 patients (9.7%) received tocilizumab.

Around a third (34.1% n=53/155) had received at least two DMARDs during their treatment course. On average, patients required 3.46 drugs to manage

their aortitis. Those who relapsed (43.2%, n=67) were more likely to have GCA (65.7%, n=44).

Vascular sequelae were present in 37.4% (n=58). The most common complications were ischaemic in nature with stroke/TIA and claudication reported in 16.8% (n=26). Aortic aneurysms were recorded in 11.6% (n=18) of cases and 5.1% (n=8) developed dissections despite being on treatment for their aortitis. One patient developed renal infarcts and ischaemic bowel leading to intestinal failure because of florid vasculitis.

Conclusion: Aortitis has a varied presentation with systemic inflammatory response syndrome being the most common. Delayed diagnosis remains a problem and especially for those with non-GCA related aortitis, which is likely to contribute to the risk of subsequent vascular complications. Vascular events including dissection are common, many of which could be preventable, emphasising the importance of early diagnosis and good disease control.

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OP0064

TOCILIZUMAB IN CRANIAL AND EXTRACRANIAL REFRACTORY GIANT CELL ARTERITIS: A MULTICENTER STUDY OF 312 CASES

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