for providing information to patients about their relative risk of ocular morbidity following a diagnosis of PMR or GCA.

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FRI0199

PRESENCE AND DISTRIBUTION OF VASCULITIS IN TEMPORAL, AXILLARY AND SUBCLAVIAN ARTERIES IN GIANT CELL ARTERITIS ASSESSED BY ULTRASONOGRAPHY AT ONSET OF DIAGNOSIS

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Background: In the last two decades ultrasound (US) has become a significant and valuable mode of diagnosing giant cell arteritis (GCA) in clinical practice (1). This is also reflected in the suggested expansion of the ACR 1990 criteria where imaging including US is equated with biopsy (2). Favorable sensitivity compared to biopsy has been shown and explained with the widespread uneven distribution of inflammation in cranial and extracranial arteries (3).

Objectives: To explore the prevalence and distribution of inflammatory involvement in temporal, axillary and subclavian arteries in patients diagnosed with GCA at an ordinary rheumatology clinic.

Methods: In this retrospective study we identified all patients diagnosed with GCA between 2006 and 2019. Since 2006 US has been used at the clinic to diagnose GCA. The vascular US examination was performed by two experienced ultrasonographers (HB, APD). The medical records were reviewed and data were collected using a predefined protocol including data collection for US at the time of diagnosis. Standard US procedure contained an assessment of both temporal arteries (superficial artery, frontal artery and parietal artery) in longitudinal and transversal planes with and without color Doppler mode. A positive US test was defined in presence of hypoechoic vessel wall thickening (halo sign). The axillary and subclavian arteries were assessed in B-mode and intima media thickness (IMT) was measured. A positive test was defined if IMT > 1 mm.

Results: A total of 69 GCA patients (20 men and 49 women) with US performed at the time of diagnosis were identified. Among them, 67 (97.1%) patients met the suggested expansion ACR 1990 criteria. The mean age was 69.9 years. Detailed results for vasculitis distribution for the temporal artery with its branches and the axillary and subclavian arteries are shown in the table below. Positive US findings were recorded in 61 patients (88.4%). A total of 45 patients (65.2%) had a positive US test in the temporal artery and 41 patients (59.4%) in the extracranial arteries. Solely extracranial arteritis was observed in 18 patients (29.5%), 22 (36.0%) had exclusively temporal involvement. Involvement of both cranial and extracranial arteries was observed in 21 patients (34.4%). Only nine patients had positive findings at just one site. Five patients had isolated unilateral subclavian affection, and two patients had isolated unilateral frontal artery and superficial artery involvement each.

Table. Positive US finding in 69 GCA patients

	Extracranial arteries		Temporal arteries		
	Subclavian	Axillary	Superficial	Parietal	Frontal
Right side	13	36	19	20	32
Left side	13	27	18	18	32
total	15	38	22	20	40
total	41		45		

Conclusion: Our data highlights the importance and value of a complete US of cranial and extracranial arteries diagnosing GCA in daily clinical care. The data demonstrate the widespread nature of arterial affection in GCA and the fact that it is often more than one site that is affected. The spreading pattern was comparable to older studies in the respect of large vessel and multisite involvement.

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FRI0200

TIME TO FLARE IN GIANT CELL ARTERITIS AND POLYMYALGIA RHEUMATICA AND REVIEW OF THE LITERATURE

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Background: Giant cell arteritis (GCA) and polymyalgia rheumatica (PMR) are two closely related inflammatory rheumatic diseases of the elderly. While glucocorticoid treatment leads to a dramatic initial improvement, the course of the diseases remains unpredictable and multifarious. Flare and relapses are common, however, data on this is limited [1][2].

Objectives: We set out to evaluate the flare rate, time to first flare and steroid dose during flare of patients diagnosed with GCA and PMR in our practice. The aim was to identify optimal timing for clinical review and contribute towards best practice.

Methods: A total of 218 patients diagnosed with GCA (38) and PMR (180) seen between 2015 and 2020 were audited. Demographic data was collected. Relapse rate, time to initial flare and steroid dose during flares were the primary endpoints for our analysis. Steroid sparing agent use was also documented.

Results: Our cohort comprised of 38 GCA patients (M=15; F=23) and 180 PMR patients (M=71; F=99) who were diagnosed between January 2015 and January 2020. The mean age of diagnosis for patients with GCA and PMR was 73 years and 71 years respectively. 10 patients (4.6%) with PMR later progressed to develop Rheumatoid Arthritis and hence, were excluded from subsequent analyses. Most patients received an initial treatment of corticosteroid therapy for both diseases with a mean dose of 39.74mg for GCA and 18.23mg for PMR. During a mean follow up time of 13.8 months, 75 patients (36%) (GCA= 6; PMR =69) experienced at least one flare which was determined by clinical diagnosis either by unremitting reversion of initial symptoms and/or elevated inflammatory markers. While 13 patients (6%) (GCA = 2; PMR =11) had a flare following completion of initial steroid therapy, 62 patients (30%) (GCA = 4; PMR = 58) experienced flares during steroid tapering, the mean steroid dose observed during disease flare for the latter was 5.25 mg for GCA and 4.67 for PMR. Majority of relapses/flares for PMR patients occurred within the first year of diagnosis (mean = 8.38 months) and after the first year of diagnosis in GCA patients (mean = 15 months). Methotrexate was the most common traditional DMARD trialed as a steroid sparing alternative (GCA = 4; PMR =23) mostly introduced post flare/relapse. The mean appointment intervals for flares/relapses in our cohort was noticed to be during the 5th and 6th scheduled clinical review for GCA and between the 3rd and 4th clinical review for PMR patients.

Conclusion: A flaring and relapsing course is common to both GCA and PMR especially during steroid dose tapering. Increased clinical surveillance and more gradual steroid tapering, particularly at the time when most flares/relapses are observed may help improve clinical outcomes and reduce glucocorticoid requirements in patients.

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