Background: Giant cell arteritis (GCA) and polymyalgia rheumatica (PMR) often coexist.\(^1\) The role of modern ultrasound in diagnosis of GCA as well as PMR is well known.\(^2\) To date it is unknown, whether patients with GCA and PMR have a different vasculitis pattern in ultrasound (US) examination than patients with GCA only.

**Objectives:** To prospectively identify differences in vasculitis patterns in consecutive patients with newly diagnosed GCA and PMR compared to newly diagnosed GCA patients without PMR.

**Methods:** US examination of the arteries typically affected in GCA, such as axillary arteries, vertebral arteries, superficial temporal arteries with both frontal and parietal branches and facial arteries was performed in patients with GCA and PMR (GCA-PMR-group) as well as in patients with GCA only (GCA-group) at time of first diagnosis. Arteries were defined as pathological, if measured intima-media-thickness by US was above respective cut-off values.\(^3\)

**Results:** The GCA-PMR-group consisted of 27 patients, the GCA-group of 18 patients. In the GCA-PMR-group, a total of 206 arteries were affected, while in the GCA-group 131 arteries were affected. Mean age and gender distribution was 74 years (SDs 9) with 10 (37%) females in the GCA-PMR-group and 74 years (SDs 9) with 10 (55%) females in the GCA-group. Median values of C-reactive protein (CRP) were 52/2 (IQR 31.7-75.7) in the GCA-group and 48.3 (IQR 175-79.8) in the GCA-PMR-group, no significance was observed (p=0.3577). The number of affected arteries per patient was 763 and 728 in the GCA-PMR-group and GCA-group, respectively. Altogether, no significant difference in vascular pattern between the two groups was observed. Exact numbers, distribution and IMT-values for all measured arteries are depicted in table 1.

**Conclusion:** In our cohort, we did not observe a significant difference in vascular patterns between patients with GCA and PMR and GCA only patients.

**References:**
Abdominal Aortic Aneurysm

Objectives: This study aimed to determine the incidence of aortic dissection among patients with AAA, and to investigate the factors associated with dissection in this population.

Methods: A retrospective review of medical records and imaging studies was conducted for patients with AAA who were treated at our institution from January 2005 to December 2019. Demographic data, clinical characteristics, and outcomes were recorded. Statistical analysis was performed to identify factors associated with aortic dissection.

Results: A total of 326 patients with AAA (mean age 65.7 ± 10.7 years, 80.2% male) were included in the analysis. During a median follow-up of 36.9 months, 19 patients (5.8%) developed aortic dissection. Several factors were associated with an increased risk of aortic dissection, including older age (hazard ratio [HR] 1.04 per year, 95% confidence interval [CI] 1.02-1.06), male sex (HR 1.85, 95% CI 1.22-2.82), and presence of hypertension (HR 1.60, 95% CI 1.02-2.49). Patients with aortic dissection had significantly higher rates of mortality compared to those without dissection (HR 3.17, 95% CI 1.48-6.81).

Conclusion: Aortic dissection is a significant complication in patients with AAA, with a higher incidence in older males and those with hypertension. Further research is needed to identify additional risk factors and develop strategies to prevent dissection.