

Age predicted the presence of serositis in both univariate (HR: 1.02, 95%CI: 1.01-1.03, $p=0.007$) and multivariate analyses (HR: 1.02, 95%CI: 1.01-1.04, $p=0.007$). Age was also a significant predictor of parenchymal lung disease in both univariate (HR: 1.03, 95%CI: 1.01-1.05, $p=0.017$) and multivariate analyses (HR: 1.03, 95%CI: 1.00-1.05, $p=0.048$). No significant results were observed assessing the predictive role of age on occurrence of macrophage activation syndrome. Furthermore, age resulted to be a negative predictor of polycyclic pattern only in univariate analysis (HR: 0.99, 95%CI: 0.97-1.00, $p=0.048$). Finally, age significantly predicted the mortality in both univariate (HR: 1.03, 95%CI: 1.00-1.06, $p=0.034$) and multivariate analyses (HR: 1.05, 95%CI: 1.01-1.08, $p=0.012$).

Conclusion: Clinical features of AOSD patients with elderly onset were described in our multicentre cohort. Although the main clinical characteristics were similar comparing older and younger patients, patients aged over 60 years at disease onset were characterised by an increased prevalence of serositis, comorbidities, mostly cardiometabolic, and a higher mortality rate. Age predicted the presence of parenchymal lung disease and mortality, and it could be considered a further negative prognostic factor in AOSD.

REFERENCES:

- [1] Mollaeian A, Chen J, et al. *BMC Rheumatol.* 2021;5(1):12.
- [2] Maruyama A, et al. *Mod Rheumatol.* 2021;31(4):862-868.
- [3] Suzuki E, et al. *Tohoku J Exp Med.* 2021;255(3):195-202.

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POS1338

CENTRAL SENSITIZATION AND RELATED FACTORS IN PATIENTS WITH FAMILIAL MEDITERRANEAN FEVER

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Background: Central sensitization (CS) is an increased responsiveness of nociceptive neurons in the central nervous system to their normal or subthreshold afferent input is an important manifestation involved in many different rheumatic diseases [1].

Objectives: This study aims to investigate the CS in patients with Familial Mediterranean Fever (FMF) and its associations with other parameters.

Methods: This ongoing study included 73 patients (57 female, 16 male) who were diagnosed with FMF according to the Tel-Hashomer criteria. Clinical characteristics including age, gender, disease duration, age at onset, genetic mutations, comorbid disease and medications were noted. Disease activity was assessed with a PRAS disease activity score. Evaluations included the Health Assessment Questionnaire (HAQ), FMF quality of life (FMF-QoL), Pittsburg Sleep Quality Index (PSQI), Fibromyalgia Rapid Screening Tool (FiRST), and the Hospital Anxiety and Depression Scale (HADS). The symptoms of CS were assessed with the Central Sensitization Inventory (CSI; range 0-100) which is a self-report outcome measure designed to identify patients who have symptoms that may be related to CS or central sensitivity syndromes (CSS) such as fibromyalgia, neck injury, temporomandibular joint disorder or migraine/tension headaches [2]. Descriptive analysis was performed for all parameters. The Mann-Whitney U-test and chi-squared test were used in statistical analysis. $P<0.05$ was considered statistically significant.

Results: The mean age of the patients was 37.6 (SD:13.6) years. Sacroiliitis occurred in 8 patients (11%), amyloidosis in 1 (1.4%), and erysipelas-like erythema in 8 (11%). The most prevalent genetic mutation was M694/any compound heterogeneous (16.4%) followed by M69V homogeneous (15.1%).

Table 1. Disease characteristics in terms of central sensitization

	Central sensitization Yes (n=34)	Central sensitization No (n=39)	p
Gender, female	31 (91.2%)	26 (66.7%)	0.02
BMI, kg/m ²	28.8 (8.8)	26.2 (6.8)	0.282
Disease duration	9.3 (6.9)	12.9 (9.9)	0.156
Number of attacks in the last 3 months	2.05 (2.1)	0.8 (1.6)	<0.001
Number of attacks in the last 6 months	3.7 (3.3)	1.5 (3.2)	<0.001
PRAS	6.3 (2.1)	4.8 (2.3)	0.004
HAQ	0.4 (0.6)	0.08 (0.2)	
FMF-QoL	38.2 (13.7)	17.3 (15.2)	<0.001
FiRST	3.9 (1.9)	1.7 (1.7)	<0.001
PSQI	9.9 (3.9)	6.4 (2.8)	<0.001
HAD-Anxiety	9.6 (4.4)	4.9 (3.8)	<0.001
HAD-Depression	7.08 (4)	4.4 (3.2)	0.003

BMI: Body Mass Index, HAQ: Health Assessment Questionnaire, FiRST: Fibromyalgia Rapid Screening Tool, FMF-QoL: Familial Mediterranean Fever Quality of Life, PSQI: The Pittsburgh Sleep Quality Index, HADS: the Hospital Anxiety and Depression Scale

Disease activity was mild in 42.5%, moderate in 32.9% and severe in 12.3% of the patients. The mean CSI was 38.4 (SD:18.7) and thirty-four (46.6 %) of 73 patients had CS according to the CSI. CSI scores were significantly higher in females than in males ($p=0.009$). Eleven (15%) patients had colchicine resistance, and those with colchicine resistance had significantly higher CS scores. In patients with central sensitization, PRAS, HAQ FMF-QoL, FiRST, PSQI, and HADS scores were significantly higher than in patients without central sensitization (Table 1).

Conclusion: CS is present in approximately half of FMF patients. CS in patients with FMF was associated with high disease activity, fibromyalgia, anxiety, depression, impaired function, poor quality of life and sleep.

REFERENCES:

- [1] Adami G, Gerrata E, Atzeni F, et al. Is central sensitization an important determinant of functional disability in patients with chronic inflammatory arthritides?. *Ther Adv Musculoskelet Dis.* 2021;13:1759720X21993252. Published 2021 Feb 15. doi:10.1177/1759720X21993252
- [2] Neblett R, Cohen H, Choi Y, et al. The Central Sensitization Inventory (CSI): establishing clinically significant values for identifying central sensitivity syndromes in an outpatient chronic pain sample. *J Pain.* 2013;14(5):438-445. doi:10.1016/j.jpain.2012.11.012

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POS1339

FACTORS RELATED TO SERUM IGG4 ELEVATION AND DEVELOPMENT OF IGG4-RELATED DISEASE: DATA FROM RESIDENT EXAMINATION

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Background: Elevated serum IgG4 levels are one of the characteristic findings in immunoglobulin G4 (IgG4)-related disease (IgG4-RD). Serum IgG4 levels have an impact to a certain extent on the diagnosis of IgG4-RD although there are some issues in their sensitivity and specificity. In the reports from Japan, China, USA, and Europe, elevated serum IgG4 levels were reported to be observed in 83-97% of patients with IgG4-RD [1-5]. In the past investigations of hospital patients, some studies reported that 10-15% of hospital patients with elevated serum IgG4 levels had IgG4-RD [6,7]. However, in general adults with no symptom, investigations of prevalence of elevated serum IgG4 levels and/or IgG4-RD have rarely been conducted.

Objectives: This study aimed to investigate the frequency of serum IgG4 elevation in the general Japanese population and its associated factors using data from resident examinations.

Methods: We measured the serum IgG4 levels in 1,204 residents who underwent a general medical examination in Ishikawa prefecture, Japan. Logistic regression analysis was used to search for factors related to elevated serum IgG4 levels. Secondary examinations were conducted for participants in whom elevation was identified.

Results: The mean serum IgG4 level was 44 mg/dL, and elevated serum IgG4 levels were observed in 42 patients (3.5%). Univariate logistic regression analyses showed that male sex, older age, lower estimated glomerular filtration rates based on cystatin C (eGFR-CysC), serum high-density lipoprotein cholesterol levels, and higher hemoglobin A1c (HbA1c) levels were associated with elevated serum IgG4 levels. Subgroup analyses in men showed that older age, lower eGFR-CysC levels, and higher serum HbA1c levels were associated with elevated serum IgG4 levels. In contrast, the analyses in women found no significant factors. One of the 10 residents who underwent secondary examinations was diagnosed with possible IgG4-related retroperitoneal fibrosis.

Conclusion: In the general population, elevated serum IgG4 levels are more common in elderly men, which is similar to the epidemiological features of IgG4-RD.

REFERENCES:

- [1] Inoue D, et al. IgG4-related disease: dataset of 235 consecutive patients. *Medicine (Baltimore).* 2015;94(15):e680.
- [2] Yamada K, et al. New clues to the nature of immunoglobulin G4-related disease: a retrospective Japanese multicenter study of baseline clinical features of 334 cases. *Arthritis Res Ther.* 2017;19(1):262
- [3] Culver EL, et al. Elevated serum IgG4 levels in diagnosis, treatment response, organ involvement, and relapse in a prospective IgG4-related disease UK cohort. *Am J Gastroenterol* 2016;111:733-43.
- [4] Lin W, et al. Clinical characteristics of immunoglobulin G4-related disease: a prospective study of 118 Chinese patients. *Rheumatology (Oxford).* 2015;54(11):1982-90.