

# **Epidemiological study of systemic vasculitis in patients referred to the Rheumatology Clinic of Imam Khomeini Hospital, Ardabil from 2018-2022**

## **Abstract**

**Background:** Vasculitis is a clinical pathological process that is characterized by inflammation and necrosis of the blood vessel wall and eventually blockage of the inflamed vessels. To better understand the effect of ethnicity, geographic location, environment and social factors on the development of vasculitis, many studies should be conducted in different regions. Early recognition based on the prevalence of vasculitis will help to manage and treat these patients and prevent irreparable damage.

**Aim:** To Epidemiological investigation of systemic vasculitis in patients referred to the rheumatology clinic of Imam Khomeini Hospital in Ardabil from 2018-2022.

**Materials and methods:** In this cross-sectional and descriptive study, 152 patients referred to the Rheumatology Clinic of Imam Khomeini Hospital in Ardabil from 2018-2022 were evaluated. The required information was collected by examining the patient files in the hospital archive. Relevant information was evaluated by inserting it into SPSS software version 22 based on the objectives of the study.

**Results:** In total, information related to 152 patients were included in the final analysis. Behcet's patients with a frequency of 67.8% and Wegener's patients with a frequency of 11.2% had the highest frequency, respectively. 52.6% of all patients were female and the rest were male. The average age of all studied patients was  $36.6 \pm 14.2$  The highest average age was related to giant cell arthritis patients and the lowest was related to Behcet's patients. Most of the patients lived in Ardabil city and worked as housekeepers and agricultural

workers. In patients with Takayasu broi carotid disease and decreased pulse, in tender temporal giant cell arthritis, in polyarthritis nodosa, weakness and myalgia, in Church-Strauss syndrome, shortness of breath, in Wegener's hemoptysis, and in Behcet's patients, mouth sores were the most common symptoms and signs. The level of ESR and CRP in patients with giant cell arthritis was at its highest level compared to other vasculitis.

**Conclusion:** Behcet's and Wegener's diseases were the most common vasculitis diagnosed in patients referred to this center. The demographic composition of the patients was similar in most of the studies. The signs and symptoms of the patients were specific to each disease and general symptoms such as fever, weight loss, arthralgia, weakness and myalgia were also evident in most of the patients. The increase of ESR and CRP as two inflammatory factors was evident in all types of vasculitis. Various paraclinical tools such as pathology, color Doppler ultrasound, chest and paranasal CTscan and CT angiography were widely used to diagnose vasculitis.

**Keywords:** systemic vasculitis, rheumatological disease, epidemiology, Ardabil.