

SEROLOGICAL SCREENING FOR BORRELIA BURGDORFERI IN BLOOD DONORS FROM ARAD COUNTY.

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Borrelia burgdorferi (BB) is the agent of Lyme disease, which is the most common vector-borne disease in the temperate zones of the northern hemisphere. The tick *Ixodes ricinus* is the most responsible vector for *Borrelia burgdorferi*, the pathogen transmitted to humans and animals by the tick during feeding.

Given the distribution of vector *Ixodes ricinus*, the main carrier of the *Borrelia burgdorferi* spirochete in Romania, and in particular, in Arad, in this work we aimed to identify the prevalence of IgG and IgM antibodies to *Borrelia* from healthy blood donors in Arad county, in order to continue the investigation regarding the presence of this pathogen in the general population and the rest of the country.

The study was initiated on blood donors residing in Arad. 187 donors were chosen both from the urban and rural area, according to age groups, and in approximately equal proportions of men and women, 105 men (56%) and 82 women (44%) – a greater number of male donors since, according to the literature, the risk of contacting potentially infected ticks is higher in men than in women.

Following the analysis performed, the results of both tests indicate a rate of over 85% negative results and compared with one other, there is a higher percentage of positive IgM than IgG both in the urban and rural areas. The number of positive IgM donors is higher in three age categories, respectively 20-30, 31-40 and 41-50 IgG, as compared to IgG positive donors.