Epidemiological study of extrapulmonary tuberculosis in Ardabil province during 2010-2020

Abstract

Background: Unfortunately, the diagnosis of extrapulmonary tuberculosis in some cases is unclear due to clinical symptoms and the need for invasive measures becomes problematic. In addition, there are differences in the prevalence of extrapulmonary tuberculosis in industrialized countries compared to developing countries. Considering the clinical importance of extrapulmonary tuberculosis and the problems in diagnosing this disease and its different prevalence in different communities and geographical areas, we decided to study the clinical and laboratory status of patients with extrapulmonary tuberculosis in Ardabil province during the past 10 years.

Aim: To determine the epidemiological status of extrapulmonary tuberculosis in Ardabil province during 2010-2020.

Methods and material: This descriptive cross-sectional study was performed on 617 patients with extrapulmonary tuberculosis diagnosis in Ardabil province from 2010 to 2020 who were selected by sampling method. A researcher-made checklist was used to collect data and the data were analyzed in SPSS software by chi-square and ANOVA tests.

Results: About 60% of patients were female and 40% were male. The total mean age of patients was 42.78 years with a standard deviation of 17.64. The highest number was in the age group of 30-39 years and the lowest number was in the age group of 90 and above. The highest number was related to 1390 with 72 cases and the lowest number was related to 1399 with 25 cases. Out of 617 patients studied, 610 (98.9%) improved and 7 (1.1%) died. The highest frequency was related to the duration of 6-month treatment with 76.2%. After that, the treatment period was 12 months with 14.1%. Also, the mean treatment period of patients was 7.19 months with a standard deviation of 2.63. In terms of comorbidities, the highest frequency was related to the absence of disease with 92.4%. Then came diabetes with 2.8%. According to the organ involved, the highest frequency was related to lymph with 24.3%. After that, the pleura was 13.6%. The highest frequency was related to Ardabil with 52.3%. After that, Parsabad was with 23.5%. It was in the last rank of Nayr city with 0.8%.

Conclusion: Considering the prevalence of extrapulmonary tuberculosis, geographical distribution and mortality rate of this disease, it is necessary to implement appropriate health and treatment plans for proper screening and timely

treatment in these patients. Given that most patients were under 50 years of age, monitoring and screening at younger ages seems necessary.