Abstract

Background: Familial Mediterranean fever (FMF) is a hereditary auto-inflammatory disease with autosomal recessive inheritance, which is characterized by recurrent attacks of fever and inflammation of different serous levels (polyserositis).

Aim: determining the findings of echocardiography in patients with familial Mediterranean fever under the age of 16.

Materials and Methods: In this cross-sectional study of 40 patients with familial Mediterranean fever, based on the objectives of the study, necessary information was compiled in the form of a special data collection form, and in the second step, the required information for each patient including age, sex, Duration of disease, echocardiographic parameters of pulmonary hypertension patients, ejection fraction, changes in heart valves, pericadial effusion and changes in large heart vessels,left ventricle mass, were investigated. SPSS software was used for data analysis.

Results: The average age of the patients was 11.23 ± 3.19 There was no significant difference between normal MPI and MPI of FMF patients in this study, there was no significant difference between normal LVEF and LVEF of FMF.only 15 percent of patients has left ventricle dysfunction. Based on our findings in this study TR was observed in 2 (5%) cases, Mild PI in 3 (7.5%) cases. E148Q mutation was most observed between patients with valve problems .4 case of patients M694V mutations has MPI dysfunctions.pulmunary hypertention ,pericardial effusion ,cardiomyopathy was not reported. The LV mass index of studied patients is within the normal range..Disturbed MPI has no significant relationship with age and sex. In all patients, The ratio of E/A is normal

Conclusion: The examination of echocardiographic findings in patients with familial Mediterranean fever under 16 years of age at Kausar Ardabil Clinic showed that only 12.5 percent of patients suffer from heart valve failure &85 percent of patients has normal MPI

Key words: familal Mediterranean fever - Echocardiography - Mutation