

The aim of this study is to present a clinical case referred to a 12-year-old boy with history of atrial septal defect (ASD) and HF shows a response to treatment with improved symptoms and quality of life. The patient's laboratory studies shown increasing of neutrophil lymphocyte ratio. Chest X-ray showed a cardiomegaly. The patient had no peripheral oedema. The echocardiography identified there were a 1.88-cm ostium secundum atrial septal defect with right atrium, and right ventricle dilatation. This case highlights the associated between congenital heart disease and heart failure in paediatrics. It also illustrates exercise intolerance could be a presentation of undiagnosed atrial septal defect with heart failure. The conclusion is the patient had developed symptomatic HF with LVEF \geq 50% as well as RA and RV dilatation. Most likely this patient developed HF due to the delayed diagnosis of ASD.