Echocardiographic findings of admitted pediatric patients with acute post streptococcal glomerulonephritis at West Visayas State University Medical Center

Falwell Dan Madalag
West Visayas State University Medical Center, Philippines

Objective: This study aimed to determine the echocardiographic findings of admitted pediatric patients with acute post streptococcal glomerulonephritis (PSGN) at West Visayas State University Medical Center.

Method: This is a descriptive analytical cross-sectional study of the echocardiographic findings of pediatric patients with acute PSGN on a definite time on admission after 12 weeks. This study was conducted at West Visayas State University Medical Center (WVSUMC). All patients from ages 18 years and 364 days below who satisfied the criteria of acute poststreptococcal glomerulonephritis admitted at WVSUMC from March 2016-June 2017 were included. The study aims to show the prevalence and incidence of acute poststreptococcal glomerulonephritis patients with significant cardiac findings.

Results: There were 31 patients enrolled in this study. On admission, 58.0% had variable degrees of valvular leaks that involve the mitral and aortic valve. There was a decrease in the frequency of the different classes of valvular involvement after 12 weeks. No patient developed systolic and diastolic dysfunction. Three patients had minimal pericardial effusion which resolved after 12 weeks. Among the twenty-eight patients, 35.7% still had variable degrees of valvular leaks that involve the mitral and aortic valve after 12 weeks of follow-up.

Conclusion: 2D echocardiographic findings of patients with acute post streptococcal glomerulonephritis show valvular leaks, increase in left atrium dimension and left ventricular end systolic diameter. The most common valve affected is the mitral valve. There is the persistence of the variable degrees of valvular leaks after 12 weeks. However, the changes on the dimensions of the left atrium and left ventricular end systolic diameter are within normal limits for age.