

Abstract

Twenty-one consecutive Black African patients with severe pure mitral stenosis were evaluated hemodynamically. It was found that advanced mitral stenosis presents itself in Kenya at a very young age (22.9 +/- 9.6 years, mean +/- S.D.), with all but three patients under thirty. Left ventricular angiography demonstrated significant impairment of left ventricular function with 50% of patients having abnormally low valves (mean ejection fraction 0.50 +/- 0.11). This diminished ejection fraction was related primarily to diffuse hypokinesia and an increased endsystolic volume. There was a significant deterioration of ejection fraction with increasing age which could not be correlated to increased severity of mitral stenosis or pulmonary hypertension. It is proposed that the diffuseness of the myocardial involvement and its progression with age in a young population without coronary artery disease represents the resolution of the acute inflammatory process of rheumatic fever in diffuse fibrosis of the myocardium and/or an occlusive vasculitis.