Patient Profile of Infective Endocarditis: An Experience from a Tertiary Care Centre

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Infective endocarditis is a serious medical condition which affects the endocardium of the heart resulting in devastating clinical outcomes unless treated promptly. In the absence of studies in Sri Lanka, a retrospective study on consecutive patients with infective endocarditis according to the modified Duke criteria was conducted from January 2013 to December 2018 in Cardiology Unit, Teaching Hospital Kandy to evaluate the patient profile. Total of 190 patients were diagnosed with a mean age of 47.9±16.1 years and male preponderance (70.6%, n=134).There were 96.8% (n=184) of native valve endocarditis and 3.2% (n=6) of prosthetic valve endocarditis. While fever (88.4%, n=168) was the commonest presentation, heart failure (30.0%, n=57), anemia (27.9%, n=53), embolic manifestations (4.2%, n=08) were also encountered. Rheumatic valvular heart disease, chronic kidney disease with hemodialysis, congenital heart diseases and previous endocarditis were observed in 15.8% (n=30), 9.5% (n=18), 5.8% (n=11) and 1.1% (n=02) of cases respectively. While isolated mitral valve 46.3% (n=88) was the commonest involved valve, aortic valve (27.4%, n=52), tricuspid valve (8.9%, n=17, pulmonary valve (6.3%, n=12),) and both aortic and mitral valves (11.1%, n=21) were also affected. From the 65.3% (n=124) of positive blood cultures, *Streptococcus* spp. (39.5%, n=49) including *Streptococcus viridians* (29.8%, n=37) was the commonest organism. While *methicillin resistant staphylococcus aureus* encompassed in 27.4% (n=34) of cases as health care associated endocarditis, *Staphylococcus aureus* (12.9%, n=16), *Enterococcus* spp. (11.3%,n=14), *Candida* spp. (4.03%, n=05)and other organisms (4.8%, n=06) accounted for other culture positive cases. However, 66 (34.7%) of patients were diagnosed as culture negative endocarditis of which 62.1% (n=41) were given prior antibiotic therapy. Thirty (15.8%) patients underwent valve replacement including mitral valve replacement (MVR) (9.5%, n=18), aortic valve replacement (AVR) (4.7%, n=09) and dual valve replacement (DVR) (1.6%, n=03). Mortality rate of 10.0% (n=19) was mainly attributed to heart failure (n=12, 63.2%). Infective endocarditis is a serious clinical entity which warrants prompt diagnosis and treatment for optimum clinical outcome.

Key words: Infective endocarditis, Rheumatic fever, Valve replacement