**ABSTRACT**

Heart disease is one of the most leading issues of death. Hence to predict this disease in advance, early detection and diagnosis is required. This plays a major role in disease severity identification, predicts the outcome of disease and helps to improve the patient management. Though there are several cardiac imaging modalities used for this purpose, less-invasive imaging modalities like coronary CT angiography, cardiac magnetic resonance imaging, cardiac radionuclide imaging such as SPECT and PET modalities are widely used for assessment of heart diseases. This study works on applications of above mentioned imaging modalities in assessing various heart diseases and provides comparison among them.