

Length of coronary sinus is important in the design of cannulation devices used in cardiac resynchronization therapy and percutaneous mitral valve annuloplasty. It displays gender and population variations that may account for the failure rate of these procedures. Cardiac conditions requiring these procedures are common in black African populations. Studies of the coronary sinus from African populations, however, are scarce and altogether absent for Kenya. The aim of the current study was to determine the length of coronary sinus among black Kenyans. Coronary sinuses of seventy-four hearts (43 males and 31 females) of adult age range (20-70years) black Kenyans obtained during autopsy were studied at the Department of Human Anatomy, University of Nairobi, Kenya. Heart samples were classified into male and female and weighed. Lengths of the heart, left atrio-ventricular groove and coronary sinus were measured in millimeters. The mean coronary sinus length was 39.55 ± 5.32 mm while that of heart was 139.73 ± 13.86 mm. The length of left atrio-ventricular groove length was 66.12 ± 9.97 mm. The sinus occupied 60% of the groove and correlated positively with the length of the groove. The coronary sinus of the study population is shorter than those reported for Caucasian populations. The length correlated with that of the atrioventricular groove and the heart.