Variation in the Number and Location of Coronary Ostia? A Cadaveric Study

Qazi Waheed Ullah*, Nazish Waheed**, Shemaila Saleem***& Khadija Qamar****
*AJ&K Medical College Muzaffarabad, **Pak International Medical College Peshawar,***Federal Medical &
Dental College Islamabad, ****Army Medical College Rawalpindi.

Abstract

Objective: Find out the pattern of anatomical variations in the number and location of coronary ostia in Pakistani population. Patients and Methods: It was a descriptive type of study and was conducted in the department of Anatomy, Army Medical College, in collaboration with various medical colleges of Rawalpindi and Peshawar, Combined Military Hospital and Military Hospital Rawalpindi during 2011. The study was conducted on thirty heart specimens obtained from routine autopsies and dissection cadavers.

Results: In 29 out of 30 hearts, there was single ostium in each aortic sinus for each coronary artery but in one of them, an accessory ostium was present as well in right coronary ostium (RCO) which gave origin to right conus artery. RCO was situated at the level of sinutubular junction (STJ) in 8 (27%) cases; above STJ in 3 (10%) cases and below STJ in 19 (63%) cases. Left coronary ostium (LCO) was located at STJ in 8 (26.7%) cases; above in 1 (3.3%) cases and below in 21 (70%) cases.

Conclusion: The coronary ostial location at or below STJ is present in majority of cases, however the frequency of the number of coronary ostia and their locations vary among different populations as reported in this study on Pakistani population. Key words: Coronary artery, Ostium, Cardiac surgery.