Indian Journal of Basic and Applied Medical Research; June 2016: Vol.-5, Issue- 3, P. 18-24

**Original article**

**A cadaveric study of coronary artery dominance on West Bengal population**

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**Abstract:**

**Introduction –** Coronary heart disease is one of the greatest killers in today’s world. Knowledge of coronary dominance is important to understand coronary artery diseases, interpret the findings and plan the treatment of cardiovascular diseases. The aim of the present study is to observe the pattern of coronary dominance and variations of posterior interventricular artery in cadaveric human heart.

**Methods:** The study was done on 50 formalin fixed adult cadaveric heart specimens in the Department of Anatomy, Medical College and Hospital, Kolkata irrespective of age, sex. The coronary arteries were examined by gross dissection and analyzed statistically.

**Observations:** In ‘right dominance’ heart posterior interventricular artery arises from the right coronary artery , in ‘left dominance’ heart it arises from the left circumflex artery and when both the right coronary artery and Left circumflex artery give origin to posterior interventricular artery ,is expressed as ‘Balanced type’.

**Results:** Right preponderance was seen in 35(70%) hearts, left preponderance in 11 (22%) hearts and balanced or codominance was seen in 4(8%) hearts. Statistical analysis of the results was done in the form of z score and p value to compare with the previous studies done in India.

**Conclusion :** Coronary dominance has an impact on prognosis of the patient with acute coronary disease. So the present study would be of use to the cardiologist and interventional radiologist to predefine the abnormalities by invasive and non invasive studies.

**Key Words :** coronary artery, coronary dominance, left dominance, right dominance, posterior interventricular artery.