

### Conflicts of interest

The authors have none to declare.

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### Tortuosity of forearm arteries in adult Indian cadavers



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**Aims and objectives:** Radial arteries are increasingly being used now a days for percutaneous coronary intervention, however this procedure encounters a high failure rate due to radial artery variations especially its tortuosity. Although clinical cases of syndromes like Guyon's canal syndrome and arm vibration syndrome have been ascribed to the tortuosity of ulnar artery but a systematic study on ulnar artery tortuosity is wanting.

**Material and methods:** The present study was conducted in sixty-one embalmed upper limbs, to report the tortuous character in different segments of forearm arteries.

**Results:** The radial artery was found to be tortuous in about 12% of the limbs. This tortuous character was more pronounced on the bony bed of the radial artery near the wrist joint. The ulnar artery was found to be tortuous in about 23% of the limbs, proximal and distal to the Guyon's canal and in 16% limbs within and adjoining the canal.

**Conclusion:** In the present study it was observed that the superficial segment, the segments which are subject to traction and terminal parts of the arteries are more tortuous. This may be a response to (a) regulate the pressure and (b) a result of reduced elastic tissue in the vessel wall.

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### Study of left coronary artery in cadaveric human hearts



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**Aims and objectives:** The coronary artery disease and their management modalities have gained increasing importance in developing countries; hence the left coronary artery (LCA) was studied under the headings of origin, dimensions, course, branching pattern, angle of bifurcation and termination to add more insight.

**Material and methods:** The present study was done on 85 adult heart specimens obtained from routine dissection conducted for undergraduate students in the Department of Anatomy at Belagavi Institute of Medical Sciences, Belagavi. The origin, dimensions, course, branching pattern, angle of bifurcation and termination of LCA was noted and photographs were taken. The data obtained was tabulated and analyzed statistically.

**Results:** In all the specimens LCA had a single ostium which was seen in left posterior aortic sinus. Out of 85 specimens studied in 88.23% specimens the ostium was present below the supra-avalvular ridge. The mean length of LCA was  $1.65 \pm 0.436$  cm and its outer

diameter was  $0.48 \pm 0.097$  cm. The LCA terminated as bifurcation (57.66%), trifurcation (37.66%), quadrifurcation (3.5%) and penat-furcation (1.18%). The angle of bifurcation of main trunk of LCA was  $72^\circ \pm 15.77^\circ$ . The left circumflex artery (LCx) terminated before crux in 90.59% specimens. The left anterior descending artery (LAD) terminated before apex in 9.41% specimens. The posterior interventricular artery (PIVA) originated from LCx in 10.59% specimens.

**Conclusion:** This study will help the Cardiologists, Radiologists and Cardiothoracic surgeons in proper planning of coronary angiography, interventional procedures and myocardial revascularization.

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### Estimation of stature in living north Indian females by correlation of percutaneous length of tibia with body height



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**Aims and objectives:** Stature or "Height of an individual is an inherent character and is considered as one of the important parameters of personal identification". In mass disasters like explosions the only part of body that can help in identification is the skeleton. Tibia is the second largest bone of the human body and landmarks on it are easily available. Therefore percutaneous measurement of tibia was taken. The aim was to correlate length of right and left tibia with body height of subject in age group of 18–24 years and to estimate stature of female by derived regression formula.

**Material and methods:** The study was conducted in the Department of Anatomy. GSVM Medical College Kanpur taking 150 female MBBS students in the age group of 18–24 years. The height and tibial length was measured in cm with the help of spreading vernier calipers respectively.

**Results and conclusion:** A positive correlation was found between length of tibia and stature. Height of subjects ranged between 141 and 180 cm with mean length of tibia on right side as 34.09 and on left side as 34.11. A regression formula was derived after applying various statistical tools. The derived formulae are as follows: (i)  $y_1 = 42.30 + 3.35x_1$  and  $y_2 = 41.88 + 3.36x_2$ ; where  $y_1$  and  $y_2$  are estimated height in cm and  $x_1$  and  $x_2$  are tibial height in cm.

### Conflicts of interest

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