

association of calcaneal spur with the different talar articular facets was studied. Further the talar facets were categorized in type I, II, III, IV & V.

**Results:** Its was studied Type I was (21.87%), II (38.5%), III (34.7%), IV (2.08%) & V (3.12%). Calcaneal spur was predominantly found in type III (47.22%) whereas absence of spur in type V.

**Conclusion:** Configuration of articular facets influence subtalar joint stability. Therefore good knowledge of these talar articular patterns would be helpful to the orthopedic surgeons to assist better treatment & management for calcaneal fractures.

**Keywords:** Calcaneum; Calcaneal spur; Subtalar joint

#### Conflicts of interest

The authors have none to declare.

<https://doi.org/10.1016/j.jasi.2018.06.018>

18

#### A cadaveric study of fibular (peroneal) artery continuing as dorsalis pedis artery associated with hypoplastic anterior tibial artery and its developmental basis



S.J. Fernandes\*, A.L. Singh, R. Bhat, P. Shetty

Father Muller Medical College And Hospital,  
Mangalore, Karnataka, India

**Introduction:** Palpation of peripheral arterial pulses are used to evaluate patients with arterial diseases. The dorsalis pedis artery is one of the most commonly used, to evaluate arteriosclerotic diseases in the lower limb.

**Aim:** To observe the variations of the fibular (peroneal) artery continuing as dorsalis pedis artery, associated with hypoplastic anterior tibial artery and its developmental basis.

**Materials & Methodology:** Sixty one (61) formalin embalmed, lower limb specimens were dissected and studied, to observe the anatomical variations of fibular (peroneal) artery continuing as dorsalis pedis artery, associated with hypoplastic anterior tibial artery.

**Results:** In one specimen of lower limb, the fibular (peroneal) artery was larger than usual and crossed the lower end of interosseous membrane and continued as dorsalis pedis artery. Posterior tibial artery had a normal course and divided distally into medial and lateral plantar arteries. However, the anterior tibial artery was found to be hypoplastic.

**Conclusions:** A good knowledge about the arterial variations around the ankle, which can be attributed to their development, is important to the vascular and orthopaedic surgeons, to prevent the occurrence of any complications during reconstructive surgeries.

#### Conflicts of interest

The authors have none to declare.

<https://doi.org/10.1016/j.jasi.2018.06.019>

19

#### Metrical study of sexual dimorphism in clavicle



Jha Rahul\*, Kumar Sushil, Bhatnagar Rajan, Ahuja Manish Singh

Army College of Medical Sciences, Delhi, India

**Background:** To determine sex from unknown skeletal remains is vital. In general male bones are heavier larger and muscular markings are more prominently seen as compared to female bones.

**Objectives:** The objective of this study was to find out comparative differences between the right and left clavicles from certain metrical parameters and to enable assessment of sex from unknown clavicles.

**Methods:** The study was conducted on 200 adult clavicles, out of which 72 were of the clavicles of male and 128 were clavicle of female. The maximum length of clavicles in mm was taken and demarking points were established by adding and subtracting  $3 \times SD$  from means.

**Results:** The mean length of right clavicle male was  $140.76 \text{ mm} \pm 10.56 \text{ mm SD}$  and that of female was  $126.75 \text{ mm} \pm 15.08 \text{ mm SD}$ . For left clavicle male, mean was  $142.86 \text{ mm} \pm 11.34 \text{ mm SD}$  and that of female was  $126.75 \text{ mm} \pm 15.08 \text{ mm SD}$ . It has been observed that left clavicle is longer than right clavicle. Depending upon length of clavicle, the sex can be decided in 1.71% female in left clavicles in my study.

**Conclusions:** The left clavicle was longer compared to right clavicle. Demarking points (DP) give 99.75% accurate data, measured by adding & subtracting  $3 \times SD$  from means. DP for length of clavicles were  $>171.99 \text{ mm}$  for male &  $<109.09 \text{ mm}$  for females. For the left side the DP was  $>172.66 \text{ mm}$  for male and  $<108.79 \text{ mm}$  for female.

#### Conflicts of interest

The authors have none to declare.

<https://doi.org/10.1016/j.jasi.2018.06.020>

20

#### A cross-sectional study of correlation of heart diameter and cardiothoracic ratio with body habitus for evaluation of cardiac enlargement in a population of West Bengal



Roy Abhijit\*, Mondal Dhruba

Calcutta National Medical College, Kolkata, WB,  
India

**Objectives:** The cardiac enlargement can be evaluated by routine chest x-ray by the maximum transverse diameter of the heart (HD) & the cardio thoracic ratio (CTR). The reference values of the upper limits of HD & CTR are mainly based on studies conducted on Western Population. As HD&CTR may vary from different parameters of body habitus and the body habitus exhibits racial differences. So, evaluation of cardiac enlargement by HD&CTR depends upon the built of the individual which in turn depends upon the parameters of body habitus. We perform the study to delineate out of HD & CTR which one is least affected by the body habitus and that one will give more accurate and impartial evaluation of predicting cardiac enlargement.

**Methods:** 850 people meeting the desired criteria are chosen. Chest X rays are taken. Body weight and heights are measured. We calculate the T.D, CTR, BMI, BSA from measured data. Statistical