

**Conclusion:** As thyroid cartilage is largest among all laryngeal cartilages, its detailed study in the form of morphometric parameters of thyroid cartilage is useful for anatomists, plastic and ENT surgeons, and radiologists to perform advanced surgical procedures, endoscopic procedure and surgeries, planning of laryngeal framework surgery, facial feminization surgery and for analysis of laryngeal CT-MRI scans.

#### Conflicts of interest

The authors have none to declare.

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#### Study of variations in origin and course of musculocutaneous nerve



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**Aims and objectives:** Variations in the origin, course, branching pattern, termination and connections of the musculocutaneous nerve are not uncommon. The musculocutaneous nerve arises from the lateral cord of brachial plexus, opposite the lower border of the pectoralis minor, pierces the coracobrachialis, descends laterally between the biceps and brachialis to the lateral side of arm and just below the elbow it pierces deep fascia lateral to the tendon of biceps brachii to continue as lateral cutaneous nerve of forearm. The aim was to study the variations in the origin and course of the musculocutaneous nerve.

**Material and methods:** 60 upper limbs of 30 cadavers (25 males and 5 females) ranging from age group of 50–80 years were studied in the department of anatomy, Dr DY Patil Medical College & Research Centre during routine dissection. All limbs were meticulously dissected and variations were noted. Photographs were taken for documentation.

**Results:** Out of 60 upper limbs variations were noted in the course and origin of musculocutaneous nerve in 6 cases. The nerve did not pierce the coracobrachialis muscle in three, it communicated with the median nerve in one, and was absent in one upper limb. There were no associated vascular variations.

**Conclusion:** Knowledge about the variations is important for surgeons, clinicians and anatomists. Awareness of possible variations is essential to avoid unexpected complications during surgical procedures such as brachial plexus blocks, arthroscopy of shoulder joint and repair of fractures of humerus.

#### Conflicts of interest

The authors have none to declare.

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#### Prevalence of various types of talar articular facets on calcanei of UP region and its clinical correlation



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**Aims and objectives:** The calcaneus is the largest tarsal bone. On the superior surface of calcaneum normally three articular facets have been described. However, these show wide variations. The main objective of this study was to calculate the prevalence of these variations on superior surface of calcanei.

**Material and methods:** This study was conducted on 200 adult calcanei of unknown sex available in the osteology section of anatomy department of KGMU.

**Results:** Classically described 3 talar articular facets were observed in only 22.5% calcanei. In 75% calcanei anterior and middle facets were continuous with each other whereas in 2% calcanei anterior facet was absent and in 0.5% all three facets were continuous with each other.

**Conclusion:** In the present study, the prevalence of type 2 calcanei was highest (75%). This type of facet predispose the individual for subtalar joint instability and can be a predisposing factor for developing arthritic changes.

#### Conflicts of interest

The authors have none to declare.

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#### Anatomical study of radial artery and its variations correlated with clinical implications



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**Aims and objectives:** To describe the radial artery and its variations with reference to origin, course, branching pattern, mode of termination and correlate them with their probable clinical implications.

**Material and methods:** This study was done on 30 upper limbs (15 cadavers). Axillary region was dissected and radial artery exposed throughout its extent to note any variation in length, lumen circumferences and thickness.

**Results:** The mean distance of the normal origin of the radial artery as one of two terminal branches of the brachial artery was  $38.7 \pm 9.5$  mm below the intercondylar line, and variant origin of the radial artery was found in three limbs. The mean of radial artery length was  $216.4 \pm 2.2$  mm and that of its lumen circumference was  $3.3 \pm 0.4$  mm at 1 cm distal to its origin and  $3.1 \pm 0.73$  mm at 2 cm proximal to the styloid process of the radius. The radial artery showed different branching patterns and modes of termination which will be presented.

**Conclusion:** Knowledge of the variations of the radial artery is important as it is used in various clinical procedures like cardiovascular interventional and reconstructive surgeries. Moreover, superficial course of this artery makes it vulnerable to accidental injuries as it may be mistaken as a vein and intravenous injections into it can be disastrous.