

**Material and Methods:** During routine Osteology classes variations in the coronoid process of the mandible were seen bilaterally and unilaterally. As this was an interesting feature study was done out of my interest. 100 bones fully ossified were collected from the department of anatomy, Narayana Medical College, Nellore. Referring to the literature regarding the same, it was found that the coronoid process was classified into three types: 1. Triangular, 2. Round, and 3. Hook shaped.

**Observation and Results:** The following are the observations: 1. Triangular shaped (20%). 2. Round shaped (15%) 3. Hook shaped (20%). 4. Unilateral Hook shaped (1%). 5. Unilateral Round shape (1%).

**Conclusion:** Knowledge of the morphological shapes of the coronoid process is useful for faciomaxillary surgeons for reconstructive purposes. The coronoid process can be easily harvested.

#### Conflicts of interest

The authors have none to declare.

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##### A correlation study of carrying angle with height



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**Objective:** The Carrying angle is defined as the angle between median axis of arm and fully extended and supinated forearm. It's normal value is 9–14° in males and is 2–3° higher in females. It has been known to show correlation with various anthropometric parameters, like – height, length of forearm, etc. This knowledge is useful for anthropologists and forensic investigators for identification of race and sex. So a correlation study was conducted between carrying angle and height.

**Methods:** A study was conducted among 400 individuals of both sexes of age group 18–40 years of Uttarakhand. The carrying angle was measured using Goniometer and height using Stature-meter and the data was statistically analysed.

**Results:** Average carrying angle was found to be  $8.38 \pm 3.62^\circ$  in males and  $12.04 \pm 2.59^\circ$  in females. Mean height was found to be  $168.07 \text{ cm} \pm 6.21 \text{ cm}$  in males and  $154.60 \text{ cm} \pm 5.71 \text{ cm}$  in females. A highly significant ( $p < 0.01$ ) negative linear correlation was found between carrying angle and height in total study population. However no significant ( $p > 0.05$ ) linear correlation was found between them when studied separately in males and females.

**Conclusion:** The height of males was significantly greater than that of females and carrying angle of males was significantly lesser than that of females. So it was a change in sex from female to male than an increase in height, which was correlating with a decreasing trend of carrying angle. And when the confounding factor of sex was eliminated by separating male and female populations, no linear correlation was found between carrying angle and height.

#### Conflicts of interest

The author has none to declare.

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##### Neuromuscular relations of the second part of the maxillary artery



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The Maxillary artery has been studied extensively in view of its tremendous importance in oral and maxillofacial surgery and also in neurosurgery. It is described in three parts with the second part of the artery either superficial or deep to the lower head of the lateral pterygoid. The present study investigated the relationship of the second part of the artery to the lateral pterygoid and temporalis. The preliminary report was presented at AACA 1988 held at Delhi.

**Materials and methods:** The study was performed on 68 embalmed cadavers (128 sides) mostly males allotted to the first BDS students of the Govt. Dental College, Ahmedabad. Meticulous dissection of the infratemporal fossa by lateral approach was performed by the authors.

**Results:** The superficial variety was found in 86 out of 128 sides (67.13%). The artery was within the lateral pterygoid in 7.8% sides and within the temporalis in 3.13% sides. It was symmetrical in 73.44% cadavers.

**Discussion:** Excepting Lauber (1901), other researchers found the superficial variety more common and overwhelmingly so in the Japanese. A rare variation is the artery piercing the temporalis. Due to substantial number of asymmetrical arteries, cautious extrapolation between sides is warranted by surgeons operating bilaterally.

Additionally, the artery has varying relationship with various branches of the mandibular nerve noted in this and other studies; these variations in the neuromuscular relations of the artery makes it a shifting artery. However, recent trend to classify the artery into several types and subdivisions based on every variation must be resisted.

#### Conflicts of interest

The authors have none to declare.

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##### Study of Atd angle in epilepsy patients: A parameter in palmar dermatoglyphics



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**Background:** Dermatoglyphics is the study of quantitative and qualitative patterns of ridge in palms and soles. It is being investigated in diseases having genetic basis. The recent evidence from adoption studies has provided a basis for the genetic contribution in generalized tonic clonic seizures.

#### Objectives:

- To study the atd angle in palmar dermatoglyphic patterns in generalized tonic clonic seizure patients.
- To compare dermatoglyphic configuration of cases with the normal Population

**Methods:** The ink method was followed to take palm prints. The palmar prints of 50 epileptic patients and 50 normal individuals of both sexes were collected for the study

**Results:** atd angle is increased in both right and left hands of combined series of male and female epileptics and only in left hand of female epileptics which is statistically significant

Interpretation and Conclusion: There is significant difference in the epileptic patients in various dermatoglyphic features when compared to controls. One of them is with respect to atd angle. Hence, it is possible to identify 'at risk' population with the help of dermatoglyphics

**Keywords:** Dermatoglyphics; Epilepsy; atd angle

#### Conflicts of interest

The author has none to declare.

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#### Morphometric study of foramen magnum in human skulls



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**Introduction:** Foramen Magnum (Latin-great hole) is a largest foramen in base of the skull. Foramen magnum is an important landmark in skull base. Neurovascular structures pass through the foramen magnum, it may compress in cases of herniation of tonsil of the cerebellum, meningiomas, achondroplasia.

**Material & methods:** One hundred dry, adult human skulls of male and female obtained from the department of Anatomy, Kamini Academy of Medical Science and Research Centre, L.B. Nagar, Hyderabad and other medical colleges. CT scan of brains obtained from department of Radiology, Mamata general hospital to taken the measurements. Foramen magnum was measured with the help of simple Vernier calipers, thread and scale.

**Results & Observations:** Antero Postero Lateral, Transverse Diameter, Foramen magnum index, Circumference of FM & surface area of FM were also calculated.

APL: Male - Mean 3.67 cm (4.2 to 3.3), Female - Mean 3.21(3.3 to 3.0)

TDL: Male - Mean 2.97(3.32 to 2.5), Female - Mean 2.61(3.0 to 2.3)

**Conclusion:** Foramen Magnum mean value will be helpful in radiological diagnostic procedures, Forensic medicine, anthropology, Neuro-Surgical Procedures, research in evolution of fossils. Sex determination in Medico-Legal Cases.

**Keywords:** Morphometry; Skull base; Foramen Magnum; Vernier calipers

#### Conflicts of interest

The authors have none to declare.

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#### A morphometric & histological study on tendon of infundibulum and other possible connections between ascending aorta & pulmonary trunk



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**Introduction:** Knowledge of normal cardiac anatomy is indispensable for the proper understanding of cardiac disease. The presence or absence of tendon or ligament has not been confirmed at the present time. Moreover, some thread like connections have been described between ascending aorta and pulmonary trunk during routine anatomical dissection. But no comprehensive study has been conducted so far to establish the nature and distribution of such structures.

**Objective:** The purpose of the present study, therefore, is to determine the existence and character of any connection between the ascending aorta and pulmonary trunk.

**Methods:** A descriptive observational study with cross sectional design of data collection was conducted in Calcutta National Medical College & Hospital over a period of six months. Forty-four cadaveric hearts were dissected and collected tissues were processed and stained by Hematoxylin-Eosin and also Van Gieson.

**Result:** No specific band was found at the root of the ascending aorta & pulmonary trunk in any case but separate band like connections were found in forty-two cases at a higher level. In one case double band was also noted. After processing and staining, it was found that the nature of such bands was mixture collagenous and fatty tissue. Tissues adjacent to the roots of the ascending aorta and pulmonary trunk were studied. It reveals discrete collagenous and fatty tissue within the cardiac muscles.

**Conclusion:** Intricate and extensive study is needed in future for detailed understanding of the nature of the bands, connecting ascending aorta & pulmonary trunk.

**Keywords:** Tendon of Infundibulum; Hematoxylin-Eosin stain; Van Gieson stain

#### Conflicts of interest

The authors have none to declare.

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#### Morphological study of talar facets and its association with calcaneal spur in dried calcaneum



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The calcaneum is one of the largest tarsal bone of the foot. The superior surface of calcaneum bears three facets anterior, middle and posterior which articulate with the talus and forms talocalcaneal joint or subtalar joint which maintains inversion and eversion of foot. Morphology of these talar articular facets play an important role in statics and dynamics of foot.

**Aims & objectives:** The study was done to observe the variations in the morphology of talar articular facets on superior surface of calcaneum and its association with calcaneal spur.

**Material & methods:** The study was conducted in 96 dried calcaneum of unknown sex from osteology bank of VIMSAR, Burla. The