

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.

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



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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.

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Metrical study of sexual dimorphism in clavicle



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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.

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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



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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

calculation are done to find out the correlation coefficient of the HD & CTR with parameters of body habitus.

Results: Study reveals that there is strong correlation of different parameters of body habitus with HD and poor correlation with that of CTR.

Conclusion: CTR is least affected by different parameters of body habitus. So, CTR is better indicator in predicting cardiac enlargement than HD in routine chest X-rays.

Keywords: Body habitus; Cardiac Enlargement; Cardiothoracic ratio; Heart diameter

Conflicts of interest

The authors have none to declare.

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Study of development of bony labyrinth in dry fetal temporal bones



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Introduction: -Development of the human inner ear primordium is a sophisticated process that proceeds rapidly in a short period of time. After numerous processes and developmental stages, the mature organs of hearing and balance are perfected before delivery.

Aim: To trace the development of the normal fetal bony labyrinth at different age of the developing fetus.

Material and Methods: 30 petrous temporal bones of human fetuses were studied, gestational age ranging from 4 to 7 lunar months. Various parameters of the bony labyrinth in dry fetal temporal bones were recorded.

Conclusion: A new regression equation has been derived to predict CR length from length of cochlea and height of lateral semicircular canal. As fetal cochlear development correlates with the surrounding petrosal morphology, studies concerning the relationship between the petrous bone measurement and genetic predisposition to congenital deafness can be useful in diagnosis of causes of congenital deafness.

Key words: Bony labyrinth; Dry fetal temporal bones; Fetal cochlea; Lateral semicircular canal

Conflicts of interest

The authors have none to declare.

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A study of sacrococcygeal teratomas in fetuses, neonates & adults in correlation with embryological & radiological concept



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Introduction: The Sacrococcygeal Teratomas (SCTs) are rare and most common congenital neoplasms in neonates, but rare in adults. Usual presentation is a mass in the sacrococcygeal region at the time of birth and arise from the caudal end of the spine, displacing

the anal canal anteriorly. The SCT results from multiplication of totipotent cells of primitive streak or may also arise from primordial germ cells that fail to migrate to the gonadal ridge.

Aims and objectives: The present study was undertaken to determine Sacrococcygeal tumors in fetuses, neonates with correlation to the incidence and aetiology.

Materials and Methods: The study was done Over a period of 3 years, out of 3000 live births with 100 still born and abortuses, we found two SCT. We have done a radiological study of adult pelvic tumours over a period of 1 year. We found one 24 year old female was diagnosed as sacral tumor by MRI report.

Conclusion: SCT can be diagnosed by prenatal sonography and MRI during pregnancy to avoid unnecessary complications. A proper management is carried out after the baby is born. In adult, SCTs are diagnosed with abdomino-pelvic ultrasound scan. In this article a brief review of literature and embryological correlation has been presented.

Keywords: Sacrococcygeal Teratomas (SCTs); Ultrasonography; MRI

Conflicts of interest

The author has none to declare.

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Rare congenital anomalies: A foetal study



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Introduction: The Congenital anomalies, Congenital malformations, Birth defects Congenital disease or Congenital disorders are synonymous terms used to describe structural, functional and metabolic disorders present at the time of birth.

This study of disorders is known as Teratology and Dysmorphology.

The risk of structural birth defects, the embryonic period during the 3rd to 8th week of gestation. The fetal period begins at the end of 8th week to term. During this time the risk for gross structural defects decreases, but organ systems may be affected.

Congenital anomalies are long term disability and its significance impacts on individuals, families & finally on society. The most common severe congenital malformations are Cardiovascular anomalies, Neural tube anomalies & Down's syndrome.

Aims & Objectives: The present study was undertaken to determine gross congenital malformation. The data on incidence of congenital anomalies were studied, according to sex, weight at birth, maternal age & disease.

Material & Methods: A prospective study of 5520 deliveries including twin deliveries for period of 5 years. The congenital malformations of 76 dead fetuses were sent to department of Anatomy.

Results & Conclusion: Out of all congenital malformations, CNS was the commonest. The rate of congenital defects was reported to be 20 to 30 per 1000 births. A detail study was done & documented and will be discussed at the time of conference.

Conflicts of interest

The author has none to declare.

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