dle trunk. Other variations include anterior division of upper trunk continued as lateral cord and pierced the coracobrachialis, upper and middle trunk fused to form common cord which divided into lateral and posterior cords, upper trunk gave suprascapular nerve and abnormal lateral pectoral nerve and formation of median nerve by three roots. These variations were analyzed for diagnostic and clinical significance making the study relevant for surgeons, radiologists in arresting failure cases and anatomists academically in medical education.

Conflicts of interest

The author has none to declare.

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9

A study on secular trend in nasal morphology and nasal index of Meitei male population of Manipur, India

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Introduction: The Nasal Morphology is one such area which contributes theoretically in the understanding of human biological evolutionary process of human face on one hand, and clinical applications in identification of age, sex, ethnicity of unknown identity in forensic medicine and correcting nasal anomalies and naso-facial contour in reconstructive surgery on the other

Objectives: The present study is carried out with the main objective of providing a baseline data of nasal features of Meitei males and also to see if any intergenerational change has taken place in the nasal morphology in the said population

Methods: A cross-sectional random sample of one hundred (100) Meitei males of Manipur belonging to 20-60 years of age were recruited for measurement of Nasal Height and Nasal Breadth. Corresponding Nasal Index of each subject was also calculated and classified accordingly following conventional categories of Martin and Saller. Appropriate statistical tools were used for systematic analysis and interpretation of the data

Results: The findings of the present study reveals that the Metei males of the two generations show significant difference ($\chi^2 = 18.24$) in the frequency percent distribution as well as in mean value of Nasal Breadth (Previous generation $\bar{x} = 3.70 \pm 0.03$ cm; Present generation $\bar{x} = 3.89 \pm 0.03$ cm) thereby showing a positive secular trend ($t = 4.75$), though no such difference is observed in Nasal height (Previous generation $\bar{x} = 4.85 \pm 0.04$ cm; Present generation $\bar{x} = 4.85 \pm 0.03$ cm, $t = 0.00$, $\chi^2 = 1.4$). The value of Nasal Index show an increase from previous generation ($\bar{x} = 76.60 \pm 0.80$) to the present generation ($\bar{x} = 80.48 \pm 0.80$) thereby experiencing a positive secular trend ($t = 3.43$) though both the population have Mesorhinae nose which is one of the characteristics of a Mongoloid population

Conclusion: The majority of the Meitei population in general have nose with a Nasal Breadth of above Medium category of falling under the range variation of 35–39 mm. A trend of increasing Nasal Breadth from previous generation to the present generation is observed, which may probably be because of change in climatic condition. However, no intergenerational change is observed as far as Nasal Height is concerned. These findings therefore suggest that genetic factor play more important role than natural environmental factor in determining the shape of human nose. One of the clinical applications of the study is that, the findings of the present study would definitely be useful to the clinicians more particularly the rhinoplastic surgeons in carrying out the rhinoplastic surgery of the nose of mongoloid population

Keywords: Nasal Height; Nasal Breadth; Nasal Index; Mesorhinae; Rhinoplastic Surgery

Conflicts of interest

The author has none to declare.

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10

The study of correlation between arm span and the stature of north Indian population

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Objective: Age, Sex, Stature are primary characteristics for identification of an individual. Stature has a definite & proportional biological relationship with each and every part of human body i.e., head, neck, trunk & extremities.

In the present study, the correlation between arm span and the standing height in adult males & females, was found to be an accurate predictor of stature. Thus it becomes an important anthropologic tool for the scientists in limb reconstruction surgeries. In mass disasters like train accidents, earthquakes, etc. and where the subject is in highly decomposed, fragmentary & mutilated form, it can be helpful in determining the identity of an individual.

Methods: The present study comprised of 150 medical students of both sexes, of age group between 18 yrs. to 25 yrs. of S.N. Medical College, Agra. The two anthropometric parameters, arm span and stature were used to calculate mean, standard deviation and Pearson's correlation coefficient.

Result: The Pearson's correlation coefficient was found to be 0.9171 and p value was calculated to be <0.00001 thus, showing a positive correlation between the stature &arm span for the medical students.

Conclusion: The findings of present study suggest that arm span can be successfully used for stature reconstruction.

Keywords: Arm Span; Stature; Anthropology

Conflicts of interest

The authors have none to declare.

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11

Morphological variations in the coronoid process of mandible

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Introduction: The Coronoid process of mandible (from Greek korone, ("like a crown") is a thin, triangular eminence, which is flattened from side to side and varies in shape and size.

Material and Methods: The study was done to rule out the various shapes of coronoid process. The prevalence of this different shape of coronoid process in mandibles

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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12

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 $8.38 \pm 3.62°$ in males and $12.04 \pm 2.59°$ in females. Mean height was found to be 168.07 cm ± 6.21 cm in males and 154.60 cm ± 5.71 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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13

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