

College, Raipur. Each parameter recorded was compared with its respective standard chart.

Result: The results were stratified by weeks of gestation from a median of 13.2 cm at 20 weeks of gestation, the AFI rose progressively to a maximum median of 14 cm at 28 weeks. The index then gradually declined to a median of 13.0 cm by 36 weeks gestation. All gestation specific AFI values were minimal lower in the studied population of Chhattisgarh women compared with standard AFI chart values.

Conclusion: Amniotic Fluid Index values differ in different population, and we standardized the reference values for normal AFI in Chhattisgarh women. We found that they are lower in the population studied compared with normal standard chart.

76. An anthropometric study of Cephalic Index in south Indian students

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Aims & Objectives: The Cephalic Index (CI) is the ratio of the maximum breadth of head to its maximum length. Cephalic Index is very useful anthropologically to find out racial differences and sexual differences. The objectives of the present study are to know the mean cephalic index and variation within the same population and gender differences.

Methods: The present study was done on 200 medical students of DM WIMS College, Meppadi, Kerala. The study included students of south Indian origin and was from all religions, with age group between 18 and 22 years. Instruments used in the study were manual spreading calipers and pencil. Cephalic index was calculated using the formula: Cephalic index = head breadth/Head length \times 100.

Results: Mean Cephalic Index of the students of south Indian origin was 80.64. There was predominance of Mesocephalic phenotype in both the sexes. Mean Cephalic Index among males and females was 79.66 and 81.26, respectively. The results revealed no significant difference in the cranial index between male and female subjects.

Conclusion: The human body dimensions are affected by ecological, biological, geological racial, sex, and age factors. The observations and results of this study may provide platform for similar extended cephalometric studies based on various geographical zones.

77. Incidence of anencephaly in foetal autopsy cases – A retrospective study

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Introduction: Anencephaly is a neural tube defect, which is due to defective closure of cranial neuropore. This neural tube defect is associated with other congenital anomalies in most

of the cases. This study was undertaken to determine incidence of anencephaly among congenital malformations seen at autopsy. Attempt was made to correlate the incidence with associated systemic anomalies, maternal age, birth order and sex of the foetus.

Material and Methods: Data were tabulated on 520 foetal autopsies conducted in the Department of Anatomy at Government Medical College and teaching hospital for a period of 3 years from August 2011 to July 2014.

Results: CMF were observed in 187 (36%) fetuses obtained from spontaneous/therapeutic abortions. Out of these 115 (61.4%) cases showed neural tube defects. Anencephaly (meroencephaly) was the most prevalent anomaly observed in 69 cases (60%). In 40 cases (58%), anencephaly was associated with other systemic anomalies including rachischisis, GIT defects and polycystic kidneys. No significant statistical correlation could be established regarding the sex of the anencephalic foetus. However, mothers in the age group of 20–25 years reported higher number (54.4%) of anencephalic fetuses.

Conclusion: Prenatal screening of the foetus is of utmost importance to rule out the presence of any CMF.

To prevent NTD, dietary supplements should be provided to low socio-economic pregnant females.

78. Morphometric study of human foetal testes of north west region of India in second trimester

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Objective: To study the co-relation of increasing gestational age with location, length, breadth, thickness, weight and volume of testis in second trimester of pregnancy.

Methods: The study was based on 20 aborted fetuses that were normal, i.e. total 40 testes taken out during routine foetal autopsy performed in Department of Anatomy, Government Medical College, Chandigarh. Foetuses were divided into 4 age groups of 12–16, 16–20, 20–24 and 24–28 weeks. The location was noted. Vernier calliper was used to measure the length, breadth, thickness of the testis, weight by electronic weighing machine and volume by water displacement method.

Result: The observations were made regarding the location of testis in 12–16 weeks was at iliac fossa and after 16 week it was above the deep inguinal ring. The mean length of testis increases with increasing gestational age; in 12–16 weeks it was 4.26 mm (right side) and 8.60 mm in the age group of 24–28 weeks. The mean breadth in 12–16 weeks on right side was 2.38 mm and at 24–28 weeks it was 4.38 mm. Similarly an increase was observed in other parameters including thickness, weight and volume in co-relation with increasing gestational age.

Conclusion: As the gestational age increases the length, breadth, thickness, volume and weight increase; however, the rate of increases in different gestational age group is not uniform. A spurt was noted in the growth of testis after 20+ weeks

of gestation. The findings will be discussed in comparison with available literature.

79. A pilot study on natural selection site of implantation in uterine pregnancy by ultrasonography in first trimester

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Objective: Implantation is an event in which the embryo adheres to the wall of the endometrium of uterus in blastocyst stage about six days after fertilization. Uterus is regarded as natural incubator facilitating the implantation following the transfer of embryo. In case of IVF or assisted in vitro reproductive procedures, among the various aspects of embryo transfer, the site of embryo placement in the uterine cavity has been postulated to influence embryo implantation rates. The purpose of this study is to find out the most common site of implantation in uncomplicated uterine pregnancy by ultrasonography.

Methods: The study was carried out on 20 subjects from 6th weeks to 12th weeks of pregnancy (by LMP) without any complication of current or previous pregnancies undergoing routine ultrasonography. Ultrasound examination was documented as (1) fundal, (2) left high, (3) right high, (4) anterior high, (5) posterior high, (6) anterior low, (7) posterior low, (8) right low, (9) left low, or (10) cervical. The distance from internal os (≥ 3 cm) was taken as cut off for high/low implantation.

Result: Among 20 cases we found 10 cases of posterior high, 5 cases of posterior low, 2 anterior high, 2 anterior low and only one case of right lateral low pregnancy.

Conclusion: The present study is a pilot study, and the data found that posterior high implantation is the most common site by natural selection in normal uterine pregnancy. These data may be used in cases of assisted in vitro reproductive procedures.

80. A study of mastoid foramina in adult human skulls

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Introduction: Mastoid foramen frequently lies at or near the occipitomastoid suture or in the squamous part of occipital bone or posterior part of mastoid temporal bone or may be absent. When present, it transmits an emissary vein from the sigmoid sinus and a meningeal branch of the occipital artery.

Objective: To study variations of mastoid foramen in adult human skulls.

Methods: 50 dry adult human skulls were taken from the Departments of Anatomy, Regional Institute of Medical Sciences, Imphal and J.N. Institute of Medical Sciences (JNIMS), Imphal, Manipur. Sex and age of the skulls were not deter-

mined. The skulls were observed for the presence or absence of mastoid foramen along with their different locations.

Results: Mastoid foramen was absent bilaterally in 4 skulls and unilaterally in 3 skulls. Multiple mastoid foramina were found in 7 skulls. Mastoid foramen was most commonly present at posterior part of mastoid temporal bone, at the occipitomastoid suture in 6 skulls and at squamous part of occipital bone in 1 skull.

Conclusion: Variations of mastoid foramen are common, which are of great importance to surgeons, especially Neurosurgeons and ENT surgeons. Knowledge of mastoid foramen and its variations is essential for every surgeon dealing in this region to avoid bleeding and other complications.

81. Morphometry of sphenoidal ridge in relation to the neurosurgical landmarks: A combined anatomical and radiological study

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Purpose: Sphenoid ridge and the surrounding structures are commonly involved in conditions such as meningiomas, carotid aneurysms and fistula. The current study investigated the measurement of sphenoidal ridge in relation to surrounding structures, which is of great clinical importance to neurosurgeons.

Methods: A high resolution anonymised 100 CT scans were collected from the hospital data pool, with slice thickness of 1 mm, contiguous non-overlapping slices, gantry setting, 0 degree, scan window diameter, 225 mm and pixel size more than 0.44. Syngo fast View (software Registered trademark of Siemens AG, Berlin and Munchen) was used to generate 3-D reconstructed CT scans. The distances of various landmarks from the sphenoidal ridge were measured. Appropriate statistical analysis was done of all the parameters on both right and left sided sphenoidal ridges.

Results: In the current study, mean sphenoidal ridge length was found to be 4.9 and 4.8 cm on right and left sides respectively. The mean distance of crista alaris to foramen ovale was observed as 4.6 cm on both the sides. Mean distance from crista alaris to tip of crista galli recorded as 4.9 ± 1.9 cm on right side and 5.0 ± 1.6 cm on left side. Distance from anterior clinoid process to foramen ovale documented as 2.7 ± 1.4 cm and 2.5 ± 1.6 cm on right and left sides, respectively.

Conclusion: The anatomical orientation of sphenoid ridge and its distances from vital structures will be useful in enhancing surgical safety and precision.

82. Pelvic girdle and the associated clinically important structures

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Abstract: The pelvic girdle and the neighboring structures are very important from the clinical point of view. The students