

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

should have a thorough understanding of these structures. It is a little complicated to make the 1st year MBBS students understand the anatomy of the pelvis and the associated organs and structures.

Objectives: To make the 1st year MBBS students clearly understand the anatomy of the pelvis and its associated organs and structures.

Materials and Methods: Real human pelvic girdle and hand-made pelvic girdle, showing the pelvic diaphragm with levator ani muscles, urogenital diaphragm, perineal membrane, peri-anal membrane, superficial and deep perineal pouches, ischio-anal fossa, pudendal canal, greater and lesser sciatic foramen, female and male genital organs etc. have been used for this study. At the time of demonstration and dissection of the perineal region, these pelvis and models are explained regarding anatomical position, pelvic inlet and outlet, white line or tendinous Arch, and different boundaries and attachments of pelvic diaphragm, urogenital diaphragm, ischio-anal fossa, pudendal canal and their contents, etc.

Results: All the participants understood structures namely, White line or Tendinous Arch, Hiatus of Schwalbe, perineal body etc. and conditions, such as Ischio-anal abscess and procedures, and such as pudendal block better than through simple dissection.

Conclusion: Structures including the white line, pudendal canal, perineal body, etc., can never be shown distinctly in the cadaver alone. This requires the assistance of models.

83. A North Indian perspective on arborization pattern of ulnar nerve

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The branches of ulnar nerve are notorious for their morphologic variability. The presence of an anomalous variation is usually asymptomatic and of academic interest. When symptomatic the variation causes neuropathy and becomes a surgical problem. Hence, the surgical procedures vis-à-vis the hand should be planned carefully keeping in mind all the possible variations.

Method: The present study was conducted in Government medical colleges of Punjab on 50 embalmed human cadavers (40 male, 10 female). The study establishes the commonest arborization pattern for ulnar nerve in North Indian hands.

Results: (1) In 92% cases (Type 1 pattern) there was bifurcation into deep branch and superficial trunk. The superficial trunk bifurcated distally into two sensory branches. (2) In 8% cases (Type II pattern) there was trifurcation into the ring finger (common digital nerve), the ulnar proper digital nerve of small finger and a deep branch just distal to the distal edge of pisiform. (3) The study examines the anatomical basis of possible clinical and applied entities related to variations

and tries to provide an ontogenic and phylogenetic basis for them.

84. Ultrasound estimation of gestational age from fetal kidney length

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Aim & Objectives: The aim of this study is to evaluate the normal fetal kidney length (KL) and its correlation with gestational age.

Materials and Methods: Sample size – 50, Study period – 4 months.

Inclusion Criteria: Women with singleton pregnancies without any complications and having a certain LMP. Booked cases in Vinayaka Mission's Hi-tech hospital, Salem, India.

Exclusion Criteria: Patients with multiple pregnancies, suspected fetal anomalies and gross maternal obesity will be excluded.

Women with singleton pregnancies will undergo standard ultrasound fetal biometry and kidney length measurements at 2nd and 3rd trimesters of pregnancy. These measurements will be used to date the pregnancies. Standard fetal biometry including BPD, FL, HC, and AC will be recorded along with the kidney length.

Results: Fetal kidney length along with other standard fetal biometry measurements will be correlated with the gestational age using linear regression equation. FKL will be the more accurate method of GA estimation during 2nd and 3rd trimester of pregnancy.

Conclusion: FKL is easy to identify and measure. It is the most accurate single parameter for estimating GA than other biometric indices especially in cases when the other parameters such as BPD, AC and HC are not reliable for assessing gestational age in late 2nd and 3rd trimester of pregnancy.

85. Lipstick method is better than conventional 'Ink Method' for taking dermatoglyphic prints

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Introduction: Dermatoglyphics has proved its importance in medico legal, anthropological and in clinical fields. Dermatoglyphics has few advantages over other investigation. In the study of the skin ridges that are found on the palms, digits, toes and soles, the most common method used for dermatoglyphic prints is 'Ink method'.

Aims: To compare Lip Stick method with Conventional Ink method for taking dermatoglyphic prints. Results of this procedure were evaluated for the clarity, easy, subject and user friendliness.