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 6^{th} weeks to 12^{th} weeks of pregnancy (by LMP) without any complication of current or previous pregnanciesundergoing 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 ($\geq$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 determined. 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