

students. The process of making of the model will be described as well the mechanism of the vocal cord function will be demonstrated during the conference.

89. A radiological study of sphenoid sinus and its related structures

T.S. Gugapriya, N. Vinay Kumar, E. Kamala, S.D. Nalina Kumari

Chennai Medical College Hospital and Research Center, Trichy, Tamil Nadu, India

Objective: Sphenoid sinus located in the body of sphenoid bone, closed with a thin plate of bone tissue that separates it from the surrounding neurovascular and glandular structures. It is divided by one or more vertical septa that are often asymmetric. The objective of this study was to access the separation of the sphenoid sinuses and its relation to optic nerve, vidian canal and foramen Rotundum as well as the extent of pneumatization of surrounding bones.

Methods: A retrospective CT analysis of sellar and parasellar region was done in 114 patients. The sphenoid sinus was studied for septation, presence of onodi cells, pneumatization of anterior clinoid process, position of optic nerve, vidian canal and foramen Rotundum in relation to the sinus.

Results: The sphenoid sinus showed main septa orienting to the left in 57, right in 25, midline in 31 and absent in 1 case respectively. Accessory septa were seen varying from 0 to 4 numbers. Fourteen cases showed onodi cells. Twenty-six cases presented anterior clinoid process pneumatization. Pneumatization of pterygoid fossa and greater wing of sphenoid were seen in 30 patients. Sphenoid septa ending in optic nerve was seen in 17 cases. Type - I optic nerve (nerve coursing adjacent to sinus) was seen predominantly in 147 cases studied. When compared to the foramen rotundum, vidian canal was frequently seen to be protruding into the sinus.

Conclusion: Knowing and visualization of these relationships and possibly present variations in this area are the key to successful surgical approach to these elements, as well as appropriate functional endoscopic procedures.

90. A computerized tomographic study of uncinat process of ethmoid bone

N. Vinay Kumar, T.S. Gugapriya, E. Kamala, S.D. Nalina Kumari

Chennai Medical College Hospital and Research Centre, Trichy, Tamil Nadu, India

Objective: The uncinat process is an important landmark in the anatomy of osteo-meatal complex of frontal recess, which also plays a vital role in the ventilation of middle meatus and sinuses. Its superior attachment shows great anatomic variability. The aim of this study was to observe and classify superior attachment and presence of pneumatization in uncinat process.

Methods: Computed tomographic images of paranasal region from 100 patients were studied after excluding those who had undergone endoscopic sinus surgery. The superior attachment of uncinat process was observed and tabulated according to Landsberg and Friedman classification. The results were analysed statistically.

Results: The superior attachment of uncinat process to the agger nasi cells (type - II) was found in 63 sides, while its attachment to lamina papyracea (type - I) and to middle turbinate (type - VI) was found in 34 and 35 sides respectively. Uncinat process ending at the ethmoid skull base (type - V), at the junction of middle turbinate with cribriform plate (type - IV), bifurcating towards lamina papyracea and junction of middle turbinate with cribriform plate (type - III) were seen in 14, 4 and 8 sides respectively. In 19 sides, the superior end showed no attachment to surrounding structures. The uncinat process was pneumatized (16%) unilaterally in 10 and bilaterally in 11 patients.

Conclusion: Preoperatively evaluating the variations of uncinat process and its pneumatization helps to avoid intra-operative damage to surrounding structures. The detailed knowledge of extent of uncinat process may also help to deduce the reason for refractory chronic sinusitis.

91. A radiological study of crista galli

E. Kamala, T.S. Gugapriya, N. Vinay Kumar, S.D. Nalina Kumari

Chennai Medical College Hospital & Research Centre, Trichy, Tamil Nadu, India

Objective: The midline bony projection of ethmoid bone-crista galli, has long been ignored though a variety of dimensions and shapes, pneumatization and its communications are observed in routine radiological imaging. Obstruction of communication of pneumatized crista galli with other paranasal chambers may lead to chronic inflammation and mucocoele development. Hence this study was aimed to study the various morphological variations of crista galli.

Methods: A retrospective observational study of 150 coronal CT images of paranasal sinus region was examined. Variations were classified based on the position of the crista galli in relation to the cribriform plate of ethmoid bone and to the degree of pneumatization. Any midline shift and connection to the adjacent sinuses were also documented.

Results: The morphology of the crista galli in the computed tomography images showed three definite positions. In 12.5% of the subjects, the crista galli did not extend beyond the level of the cribriform plate of ethmoid bone. It extended less than 50% of its height below the cribriform plate in 82.5% and more than 50% in only 5% of subjects. Pneumatization of crista galli was seen in 12.5% of subjects. The pneumatized crista galli was connected with the ethmoidal and frontal air sinuses in 20% and 60%, respectively.

Conclusion: The pneumatizations of crista galli and related pathological processes within it have not been correlated with the patients' complaints and the clinical symptoms so far. Hence this study suggests that otolaryngologists and

radiologists should be informed of the presence of these variations and emphasize that they should report these.

92. Application of e-learning in anatomy – A knowledge, attitude and practice (KAP) study

S.K. Ghosh, S. Chakraborty, S. Biswas, S. Sharma

Department of Anatomy, ESI-PGIMS & ESIC Medical College, Joka, Kolkata, West Bengal, India

Background: This millennium has seen e-learning playing an increasingly important role in medical education as an innovative method of teaching-learning offering customized and personalized learning opportunities for students. However, perceptions of 1st year MBBS students regarding e-learning in anatomy are yet to be explored. Therefore, this KAP study was designed with both close and open ended questionnaire to identify the applications of e-learning in anatomy.

Method: A self-designed close- and open-ended questionnaire was framed to explore perceptions of 1st year MBBS students regarding applications of e-learning in studying anatomy and performance in formative assessments. Following a pilot study, the questionnaire was administered among 100 1st year MBBS students before the summative assessment. Responses were collected, analysed and recorded.

Results: All the students were found to be aware of e-learning tools available. 10% acknowledged Wikipedia as the most popular e-learning tool followed by YouTube videos (7%) and standard Google search (3%). 14% students opined that e-learning tools contributed in quick revision about anatomy, while 18% and 5% students used those for exam preparations and clarifying doubts, respectively. Overall 63% students perceived e-learning as an effective medium, while 30% students opined against it and the remaining 7% were undecided regarding its utilization while learning anatomy.

Conclusion: It can thus be concluded that majority of the first year medical students valued e-learning as an effective learning medium for anatomy. It is also suggested that e-learning in medical education curriculum would possibly be effective in improving student learning to achieve better performance related outcome.

93. Analysis of body donation in Saurashtra region: A retrospective study

V. Sharma¹, K.K. Zaveri¹, R.K. Patel¹, R.M. Patel¹, M.M. Patel¹, T.C. Singel²

¹ M. P. Shah Government Medical College, Jamnagar, Gujarat, India;

² B. J. Medical College, Ahmedabad, Gujarat, India

Introduction: Body donation is defined as the act of giving one's own body after death for medical research and education.

Aim: Aim of the present study was to analyse the pattern of body donation in Saurashtra region.

Materials and Methods: This was a retrospective study, done by collection of data through the proforma which was

obtained, at the time of body donation from the relatives and known of deceased from anatomy department of our institute, for the year 2012 and 2013.

Results: Out of total 40 cases taken, 95% were above 50 years, 75% were male, 67% were literate and 63% were non-working.

Conclusion: Hence concluded that the most of the body donated to our institute were aged >50 years, most of them were literate and were non-working at the time of death. Males were found to outnumber females in body-donation.

94. Olanzapine induced placental changes in mice

Anand Mishra, Soumya Khanna

Department of Anatomy, IMS, BHU, India

Introduction: Olanzapine, a typical antipsychotic is mainly used in treatment of schizophrenia and bipolar disease.

Materials & Methods: Olanzapine was given to pregnant mice in doses of 0.2 mg/kg and 2 mg/kg on day 6–12 of gestation, while control mice were given distilled water on same days of gestation. The mice were sacrificed on day 19th of pregnancy by deep ether anaesthesia, and placentae were collected after performing uterotomy. The placenta were weighed, observed for overt anomaly, fixed 10% formalin, and processed for histological study by staining with H&E.

Results: The treated placenta shows a dose dependent hyalinization and thickening of trichorial membrane and disruption of maternal venous sinusoid.

Conclusion: Olanzapine causes toxicity in placenta and thus can harm the fetus so it should be used with caution in pregnancy.

95. Effect of consanguinity on congenital defects

Charmode Sundip Hemant

Esic Medical College Parippally, Kollam, Kerala, India

Objective: To determine the Influence of Consanguinity in occurrence of congenital anomalies and the occurrence of more common types of congenital anomalies.

Methods: The study was done retrospectively in Government medical college and its attached hospitals during the period of 1st October 2010 till 31st May 2012. A total of 182 congenitally anomalous live births and still births admitted in above hospitals during the same period were studied against total deliveries taken place (10,114). Their parents were enquired using Questionnaires and information regarding consanguinity, degree of consanguinity, type and subtype of anomaly etc. was obtained. Observations were statistically analysed and compared with previous studies.

Results: Occurrence of congenital anomalies was 1.16%. Cardiovascular anomalies (39 cases) were the most common type of malformation and Atrial septal defect (18 cases) the most common subtype. Most common form of Degree of consanguinity found among consanguineously married parents with anomalous births was third degree/first cousins, half uncles