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 handmade 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 fale 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

Gurdeep S. Kalyan^{1,2}, Gaurav Agnihotri^{1,2}

¹ Department of Anatomy, Government Medical College, Patiala, Punjab, India; ² Presently Joint Director, Department of Medical Education & Research, Government of Punjab, India

The branches of ulnar nerve are notorious for their morphologic variability. The presence of an anamolous 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 phylogenic basis for them.

84. Ultrasound estimation of gestational age from fetal kidney length

Diana Laishram, Geetha Anand, Senthilnathan

Vinayaka Mission's Kirupanda Variyar Medical College, Salem, India

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

<u>F.W. Masih</u>, S. Gupta, P. Jaiswal, T. Gulyani, M. Jelia, K. Makhija

Government Medical College, Kota, Rajasthan, India

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. **Method:** To evaluate both of these procedures, we taught a class of 150 medical students about dermatoglyphics in general, about its importance and the process to analyze them. We demonstrated both the methods to obtain the prints. Thereafter the students were divided into 15 smaller groups of 10 each; they were provided with all necessary materials and asked to perform both procedures to obtain the prints and analyze them. Then they evaluated both the procedures by filling a simple questionnaire.

Results: It was found that in terms of ease of procedure of obtaining the prints, 97% found the lipstick method better, 70% evaluated the lipstick print method to be more clear and accurate than the Ink method, and 80% found the lipstick print method easier to analyze. All 100% accepted that lipstick method was more subject-friendly than Ink method. This present study is also supported by study of Gupta RK.

Conclusion: This lipstick method is easy, user-friendly and as efficient for analysis as the conventional method of ink method. This is cheap compared to hi-tech methods. We strongly recommend that this method should preferably be used for taking dermatoglyphic prints.

86. A study of physiological intracranial calcification on Ct scan in eastern Indian population

<u>Panchali Som</u>¹, Sumit Datta², Anubha Saha¹, Asis Kumar Ghosal¹

¹ Department of Anatomy, IPGMER & SSKM Hospital, India; ² Department of Radiology, Belle Vue Clinic, Kolkata, India

Background: Knowledge of physiological calcification in brain parenchyma is essential to avoid misinterpretation during radiological evaluation. The calcifications are commonly seen in basal ganglia, pineal gland, falx cerebri, tentorium cerebelli and choroid plexus.

Objective: To determine the incidence of physiological intracranial calcification and its relationship to age and sex in eastern Indian population.

Method: A cross sectional descriptive study of CT scan brain was performed in the age group between 20-80 yrs in Eastern India. The study was conducted on 64 Slice MDCT PHILIPS Brilliance. Majority of our patients were of road traffic accidents, and routine CT scan study revealed these physiological calcification and did not possess any morphological abnormality.

Results: 100 patients, of which 59 male and 41 female, were studied, and overall 168 separate calcified areas were identified due to co-existent calcifications in most of the patients. The incidence of calcification was in pineal gland (62%), choroid plexus (54%), dura mater (26%), basal ganglia (8%), dentate nucleus (1%) and Pituitary gland (0%). Details will be discussed during presentation.

Conclusion: Physiological calcifications in some of the intracranial structures are not a very uncommon finding and it should not be confused with a pathological one.

87. Histological evaluation of lung of Swiss albino mice after prolonged therapeutic doses of NSAID-Ibuprofen

<u>S.D. Hiware</u>, V.K. Gujar, V.R. Wankhede, A.M. Tarnekar, M.R. Shende

Mahatma Gandhi Institute of Medical Sciences, Sewagram, Wardha, Maharashtra, India

Objective: To observe histological changes and selective morphometric parameters of the lung of Swiss albino mice after prolonged therapeutic doses of NSAID-Ibuprofen.

Method: In present study, young adult Swiss Albino mice were used. 25 mice in experimental group and 25 in control group were given therapeutic dose of NSAID-Ibuprofen and distilled water, respectively, by gastric gavage for 6 weeks. After 6 weeks, those mice were sacrificed and their lungs were processed for histological study. The results were compared between experimental and control groups.

Results: We observed no apparent histological change in the lung of the experimental group as compared to control group. Details of histological study and morphometric parameters will be presented later.

Conclusion: Prolonged therapeutic dose of NSAID-Ibuprofen by oral route does not have any adverse effect on micro architecture of lung.

88. Intrinsic muscles of larynx in action – A 3-D working model

M. Gopalan¹, Unnikrishna Menon²

¹ Medical Illustrations & Centers for Digital Health, Clinical Skills Simulations, India; ² Department of ENT, School of Medicine, Amrita Institute of Medical Sciences, Kochi, Kerala, India

Abstract: The human larynx is a multi-functional organ – a conduit for breathing, airway protection and phonation. The true vocal folds stretched between the thyroid and arytenoid cartilages with the intrinsic muscles of larynx representing the functional focal point. The usual textbook description, static models and online videos are just not sufficient for a proper understanding.

Objective: To prepare a dynamic model of larynx for hands-on study of the intricate movements of the vocal folds.

Methods: A laryngeal cartilage-frame work is made in fiber glass. Elastic bands as vocal folds with muscles in Silicon rubber are specifically fixed.

Results: We have succeeded in making a fully functional 3-D model of Larynx that can be operated electronically/manually. **Conclusion:** The dynamic range of movements of these folds – abduction, adduction-tightening and relaxing – made by the intrinsic muscles attached to the cartilages are well demonstrated. This would be of help not only for didactic study of the physiology of the vocal folds but also for understanding of clinical conditions such as the effects of paralysis of the laryngeal nerves. The detailed study of this group of muscles is extremely important for Anatomy/Physiology, ENT, Neurology-UG/PG as well Audiology & Speech Therapy