performing any intervention around hip joint. A higher division of the nerve can result in escape of any one division from any injury and can lead to failure of the poplitial block anaesthesia.

52. Craniofacial growth prediction based on mandibular rotation in deep and shallow antegonial notching – A cephalogram study

Golconda Charitha [1], Mokkapati Pariplavi [2], Velichety Subhadra Devi [1]

[1] *Srivenkateswara Institute of Medical sciences – Sri Padmavathi Medical College for Women, Tirupati, India*; [2] *Osmania Medical College, Hyderabad, India*

Introduction: Directional growth prediction of craniofacial region has gained importance. It is related to the efficacy and timing of treatment of dental malocclusions. There is increased realization that considerable individual variation occurs in craniofacial growth and morphology.
Aim: To observe whether statistically significant differences occur for the measurements that represent mandibular rotation between groups with deep and shallow mandibular antegonial notching.
Material & Method: Pre-treatment lateral cephalograms of 80 adults of both sexes were obtained from the files of the Dept. of Orthodontics, Govt Dental College and Hospital, Afzalgunj, Hyderabad out of which 40 were with deep and 40 with shallow mandibular antegonial notching. Each subject's pretreatment lateral cephalogram was traced using tracing paper, after which angular and linear measurements were made. Means and Standard deviations were calculated for each parameter and student t-test was done and the differences were considered statically significant when P value was less than 0.05.
Result: Among the four angular measurements, three were greater in deep notch group and one was greater in shallow antegonial notch group and all were statistically significantly. Out of two linear measurements, one was greater in deep antegonial notch group and was statistically significant.
Conclusion: Clockwise rotation of mandible results in vertical growth pattern. Extremes of this condition cause hyper divergent growth pattern/skeletal open bite. Counter clockwise rotation of mandible results in horizontal growth pattern. Extremes of this condition cause hypo divergent growth pattern/skeletal closed bite.

53. Superior and inferior thyroid artery: Branching pattern and anastomoses

Mahesh Sharma, Kunal Chawla

Government Medical College & Hospital, Chandigarh, India

Abstract: The abundance of the blood supply of the thyroid gland is known to every anatomist and surgeon. To minimize the risk of hemorrhage during thyroid surgery compels the surgeons to keep in mind the variations in the terminal glandular branching pattern and anastomoses of arteries. Complete specimens of thyroid gland with its intact arterial blood supply were dissected out from fifty postmortem bodies. All the four arteries were cleaned and identified. A mixture of red lead dissolved in turpentine oil was injected into the arteries and then the specimens were kept in 10% formalin for one month and dissected out. Superior thyroid artery (STA) divides into two branches (59%), three branches (39%) and four branches (2%) of cases. Cricothyroid artery also gave branches in 25% of cases. Inferior thyroid artery (ITA) gave two branches (96%), three branches (3%) and no glandular branches (1%) of cases. Besides these, tracheal and oesophageal arteries also supplied the gland in 21% of cases. Only thirty-five anastomoses were studied upon the twenty-five thyroid glands, rest of the twenty-five thyroid glands were not studied due to technical problems during dissection. These anastomoses were between STA and ITA of same side (42.85%), STA of both sides (17.14%), ITA of both sides (5.71%), STA of one side and ITA of opposite side (8.57%), cricothyroid artery of one side and STA of opposite side (8.57%), cricothyroid artery and STA of same side (5.71%), cricothyroid artery of one side and ITA of opposite side (5.71%), both cricothyroid arteries (2.85%) and branches of ITA of one side (2.85%). The present study was aimed to find the variations in the branching pattern of STA and ITA and arterial anastomoses upon the thyroid gland.

54. Morphological study of left sub-valvular apparatus in human foetal hearts

O.S. Thounaojam, N.S. Thounaojam

Department of Anatomy, Regional Institute of Medical Sciences, Imphal, India

Objective: To study morphological variations in papillary muscles, chordae tendineae and mitral valvular cusps in left ventricle of human foetal hearts.
Methods: This study was carried out on 50 formalin fixed human foetal hearts of gestational age ranging from 12 to 40 weeks in the Department of Anatomy, RIMS, Imphal. Left ventricles were cut opened and the number, position, pattern of papillary muscles, attachment of chordae tendineae and mitral valvular cusps were observed and reported.
Results: Different modes of variations in number, position and pattern of papillary muscles were observed. Among the anterior group of papillary muscle, single papillary muscle with multiple head is the commonest variant. In 12 cases, single posterior papillary muscle with multiple heads was found. In 4 cases, single anterior and posterior papillary muscles was noted and both the papillary muscle provided chordae tendineae to both anterior and posterior cusps. Chordae tendineae were attached to both marginal and rough zone of the anterior cusp. Those chordae tendineae attached to rough zone were found extending beyond it under the endocardium. In all cases, there was only one anterior cusp, whereas two well demarcated posterior cusp were seen in two cases only and in the remaining cases only serrated margins were noted.
Conclusion: Knowledge of variations in sub-valvular apparatus will help understanding different pathologies of heart and also the planning of cardiothoracic surgeries.