Discussion and conclusion: Ulnar nerve compression, flexor extensor in coordination of elbow joint can be serious clinical manifestation of this type of variation. Aberrant bellies may produce confusion in radiologic study. Almost 3.5% cases showed variations. Muscle graft can be taken from accessory bellies if not traversed by any neurovascular structures.

Conflicts of interest

The author has none to declare.

http://dx.doi.org/10.1016/j.jasi.2017.08.071

65

Measurement of femoral head diameter and its correlation with the femur length

Diana Laishram*, Shanta Chandrasekaran, Deepti Shastri

Vinayaka Mission's KirupandaVariyar Medical College, Salem, India

Background: Stature reconstruction from skeletal remains form a part of the forensic anthropological analysis for the purpose of identification of an individual. Regression formulae for stature estimation have been generated for indigenous population. When a dead body has become skeletonised and the anatomical relationship of individual bone is lost, a single intact long limb bone can help in estimation of stature as there exists a relatively high correlation between limb bone length and stature.

Aims and objectives: To derive regression equation for estimation of femur length using maximum vertical diameter of the femur head.

Materials and methods: Sample size – 200 unpaired femur. Place – Department of Anatomy Vinayaka Mission's Kirupananda Variyar Medical College & Vinayaka Mission's Homeopathy College. Study period – 2 years. Study design – Cross-sectional prospective study.

Methods: Maximum vertical diameter of the femur head is measured by using a vernier caliper at right angle to the long axis of the neck of femur. Maximum femur length is measured from the superior portion of the femoral head to the inferior portion of medial condyle by using osteometric board. Data is statistically analysed for regression.

Results/observations: In the present study, maximum vertical diameter of the head showed positive correlation with the maximum femur length.

Conclusion: Thus, when the proximal fragment of femur is available, the maximum length of femur can be calculated from the metric evaluation of the maximum vertical diameter of the femur head.

Conflicts of interest

The authors have none to declare.

http://dx.doi.org/10.1016/j.jasi.2017.08.072

66

A morphological and morphometric study of the acromion process and glenoid cavity of scapulae in north Indian population

Akanksha Verma*, J. Chopra, R.K. Dewan, R.K. Verma

King George's Medical University, Lucknow, India

Aims and objectives: Anatomic details and variations of shoulder region are important for diagnosis and management of corrective surgeries in this area. Acromion morphology is believed to play a key role in impingement syndrome and pathogenesis of rotator cuff diseases. Present study was carried out with the purpose to collect morphological data of acromion process and glenoid cavity.

Material and methods: We studied 100 dry scapulae (50 of each side) of unknown age and sex obtained from the Department of Anatomy, KGMU, Lucknow. Morphological shapes of tip of acromion and shapes of glenoid cavity were evaluated. Length, breadth, anterior thickness, acromio-coracoid distance, acromio-glenoid distance and height of coraco-acromial arch were measured.

Observations and results: The most common shape of the acromion process noted was intermediate shape. The three types of acromion were observed as type-Iseen in 40%, type-II in 41% and type-III in 19%. In 88% of scapulae, anterior two-third of inferior surface was rough. The mean length and width of scapula were 143.83 ± 9.51, 102.95 ± 6.29 mm respectively. The mean length, width, and thickness of acromion process were 44.32 ± 4.41, 24.40 ± 2.51, 6.83 ± 0.91 mm, respectively. The mean acromio-coracoid distance and acromio-glenoid distance were 37.01 ± 4.47, 29.62 ± 3.60 mm respectively.

Conclusion: The results of present study may be of help to the shoulder surgeons, anthropologists and anatomists.

Conflicts of interest

The authors have none to declare.

http://dx.doi.org/10.1016/j.jasi.2017.08.073

67

Metric and morphognostic analysis of fetal ilium

Aarti Rohilla*, Kamal Singh, Luv Sharma, Jyoti Rohilla

Pt. B. D. Sharma PGIMS, Rohtak, Haryana, India

Introduction: Sexual dimorphism is well established in the adult pelvis and is known to provide the highest level of information. But, studies on fetal collections are scarce and with contradictory results. This topic is highly contested as some researchers are of opinion that determining sex from fetal remains is futile as secondary sexual characteristics does not appear until puberty, while some are of opinion that sexual differences are observed in fetal ilium.

Materials and methods: The present study was conducted on 34 pairs of fetal ilium (22 males and 12 females) retrieved during medicolegal postmortem examinations. The different metric and morphognostic parameters were studied from the selected points by using digital vernier caliper, a ruler and a graph paper. Descriptive statistics of both the sexes for left and right sides were compared and analyzed using SPSS software.