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Correlation of anthropometric indices related to obesity with pulmonary function tests in north Indian females



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Introduction: Obesity is becoming one of the serious public health problems of modern world with rapidly changing lifestyles involving consumption of highly caloric foods with decreased physical activities.

Objectives: The aim of this study was to evaluate the prevalence of deranged anthropometric indices, pulmonary function tests and correlation between the anthropometric indices related to obesity and pulmonary function test.

Material and methods: This study was done on 400 female subjects in the age group of 18–40 years including 200 from rural area and 200 from urban area of North Indian population. Various anthropometric measurements (height, weight, waist circumference, hip circumference), Parameters of pulmonary function tests such as FVC, FEV1, FEV1/FVC, FEF25–75%, PEFR by using spirometer.

Results: The mean value of BMI is (23.33 ± 4.75) , WHR is (0.86 ± 0.079) , WHtR is (0.52 ± 0.086) in rural population and the mean value of BMI is (22.55 ± 4.57) , WHR is (0.82 ± 0.072) , WHtR is (0.49 ± 0.079) in urban population.

Conclusion: Pulmonary function tests are highly affected by anthropometric indices (BMI, WHR, WHtR).

Conflicts of interest

The authors have none to declare.

<http://dx.doi.org/10.1016/j.jasi.2017.08.013>

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Morphological and morphometric variation of superior orbital fissure



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Aims and objectives: The superior orbital fissure is the structure which connects cranial cavity to the orbit. In most of the cases fissure has a long and narrow lateral part and broad and shorter medial part. The morphology and morphometry of the fissure may help to serve as a guide for surgeons performing the various orbital surgeries.

Materials and methods: The study was conducted on 62 dry human skulls obtained from Osteology Lab of Department of Anatomy, KGMU, Lucknow. The superior orbital fissure of both right and left sides was observed from external aspect. Different shapes of the fissure were noted like classical fissure, triangular, oval, irregular. The length and width of fissure was calculated with the help of divider and ruler. Length was observed as maximum distance between the two ends of fissure likewise width was calculated as maximum distance between two walls of the fissure.

Results and observation: The incidence of triangular fissure was 19.35% (24), classical fissure 18.54% (23), oval 7.25% (9) and irregular 4.83% (6) was found on right side. On the left side, the incidence of triangular fissure was 10.48% (13), classical fissure 27.41% (34), oval 7.25% (9) and irregular 4.83% (6). The mean length of the fissure on right side was 1.683 cm while on left side was

1.661 cm. The mean width of the fissure on right side was 0.824 cm while on left side was 0.906 cm.

Conclusion: Classical fissure was observed in maximum number of skulls, information of morphology and morphometry is important as it allows the surgeons to anticipate the topography for the intraoperative surgeries.

Conflicts of interest

The authors have none to declare.

<http://dx.doi.org/10.1016/j.jasi.2017.08.014>

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A visit to some unseen parameters of jugular foramen dry skulls of north Indian population



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Background: A lot of studies have been done on jugular foramen (JF), but a review of the literature revealed a lack in the documented JF morphometry in certain aspects. The purpose of this study was to evaluate a combination of reported and unique morphometric parameters of the JF.

Introduction: The jugular foramen, with its internal and neighbouring vital structures, represents a major challenge in the treatment of lesions involving it. Microsurgical techniques improvement, have allowed for the removal of these lesions, previously regarded as not possible to undergo surgery. Therefore, the detailed study and the knowledge of the characteristics related to this foramen are indispensable.

Materials and methods: The study was carried out on 50 dried skulls procured from colleges in New Delhi. 100 jugular foramina were studied on both right and left side of skulls. The extracranial length, width of jugular foramen and width and depth of jugular fossa were measured using vernier calipers. Presence of dome, complete and incomplete septation was also looked for. The other parameters were distance of the jugular foramen from the mastoid process, the vomer, lateral pterygoid plate, medial pterygoid plate, occipital condyle and centre of foramen magnum were considered. The morphometric data and demographic factors were analysed.

Results: Most results showed that right side parameters were more than left.

Discussion: The values were comparable to most Indian studies. The new parameters done are discussed in detail.

Conclusion: The area of the jugular foramen is compact and laden with important neurovascular structures, care must be taken in choosing the best approach on a case-by-case basis. Certain bony landmarks and distances in relation to jugular foramen can be helpful to radiologists, ENT and neurosurgeons.

Conflicts of interest

The author has none to declare.

<http://dx.doi.org/10.1016/j.jasi.2017.08.015>