

Conference Abstract

DAY 1 15th September 2023 (Friday)

ORAL 2

3.30-5.00 pm

Scientific Session 7

Anatomical and Radiological Exploration of Sella Turcica – It's Surgical Implications**V Kurian Varughese, Nishaa P, Padmalatha K, Chitra N, .Shyamala B Y, Seema S R**

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Introduction: The Sella turcica is an important saddle shaped structure that houses the pituitary gland and located in the middle cranial fossa. One of the widely used landmarks in the skull, used for cephalometric tracing is the sella point which is located in the center of sella turcica, which is placed in the middle of the pituitary gland at the base of the skull. Accordingly, the five morphological variations are oblique anterior wall, sella turcica bridging, the double contour of the floor, irregularity (notching) in the Posterior part of the dorsum sella and pyramid shape of dorsal sellae. An understanding of the sphenoid sinus, anatomic features and variations, and precise orientation of the sella turcica and surrounding vital structures are critical before and during surgery

Objectives of the study: To study the morphology and morphometry of sella turcica, Age and gender- related variations in Sella turcica, Relationship of Sella with Internal carotid artery in the cavernous sinus.

Methodology: Fifty dry adult skulls of unknown sex and age, Fifteen Cadaveric pituitary fossa specimens collected from the Department of Anatomy will be examined. The values will be measured using calipers. 100 CT scans will be collected from Department of Radiology and analyzed. Morphometric analysis was done using the following parameters -Length of sella turcica, Sellar width, Sellar height along anterior aspect, Sellar height along posterior aspect, Sellar height average, Cross sectional area- value in millimeter², Sellar depth, Anteroposterior diameter

Results. Of the 88 lateral CT scans collected, 30 were of females and 59 of males. The sellar height of females were 5.498 ± 1.222 , sellar width of females 7.716 ± 1.368 . the sellar height of males were 5.308 ± 1.309 and sellar width was 7.857 ± 1.352 . Further results will be discussed during presentation

Conclusion: the exact dimensions of sella turcica are an important consideration in the diagnosis, and treatment of diseases of pituitary gland and brain. The morphology of sella turcica is different from person to person. There were no significant differences in size of sella turcica between genders of the studied subjects.