J Otol Rhinol 2018, Volume 7
DOI: 10.4172/2324-8785-C3-015

Correlation between sphenoid sinus pneumatization and pituitary tumours

Gokul Gopi, Saurav Sarkar, Sumit Bansal, Suprava Naik and **Pradipta Ku Parida**
All India Institute of Medical Sciences, India

Introduction: The pituitary gland- in early gestation shows a finger like projection of ectoderm that grows upward from the roof of the mouth called Rathke's pouch and develops into the anterior pituitary or adenohypophysis. Simultaneously, another finger of ectodermal tissue grows ventrally from the diencephalon of the developing brain to become the posterior pituitary or neurohypophysis. Eventually, the two tissues become tightly apposed, but their structure remains distinctly different, reflecting their divergent embryological origins. On either side of the pituitary gland is the cavernous sinuses and below it the sphenoid sinus.

Aim: The aim of this study is to detect the various types of pneumatization/anatomical variation of sphenoid sinus and its relation with various types of pituitary tumours.

Materials & Methodology: The methodology involved a retrospective study was conducted on patients operated for pituitary tumours by trans sphenoidal transnasal endoscopic approach at All India Institute of Medical Sciences Bhubaneswar in the past 3 years. Study was done on the anatomical variation of the sphenoid sinus and the occurrence of pituitary tumour in them.

Results: The mean age of the study population was 41.76 years (17-71). By Chi square test, it was found that there exists no significant association between the pattern of pneumatization and occurrence of pituitary adenoma (p value=0.9633). By chi square test, it was also found that there exist no significant association between occurrence of pituitary adenoma and the number of septa in sphenoid sinus.

Conclusions: There is no significant correlation between sphenoid sinus pneumatization and occurrence of pituitary adenomas but more studies in larger population is required before negating its correlation.

gokulgopi2@live.com