International Journal of Medical Science and Clinical Research Studies

ISSN(print): 2767-8326, ISSN(online): 2767-8342 Volume 01 Issue 04 June 2021 Page No : 82-84 DOI: <u>https://doi.org/10.47191/ijmscrs/v1-i4-07</u>

Anatomical Variation in South Indian Population in the Parietal Bones: Wormian Bone/Inca Bone

B. Ashwinidevi¹, A. Saranya², R.Yasodai³

¹Research scholar, vinayaga mission research university, Department of anatomy, Sri Ramakrishna dental college& hospital, Coimbatore

²Department of anatomy, KSR institute of dental college& hospital, Tiruchengode ³Department of anatomy, Sri Ramakrishna dental college& hospital, Coimbatore

ABSTRACT

Background of the Study: Accessory bone found in the human skull bone between squamous part of parietal and in between lambda suture is called inca bone or wormian bone. A total of 100 dried skulls were examined to know the anatomical variations of the inter parietal bone. This variants of the bones are considered as normal. This knowledge of the study very useful for the neurosurgeon, orthopedic surgeons and forensic experts for their clinical intervention.

ARTICLE DETAILS

Published On: 29 June 2021

Available on: https://ijmscr.org

KEYWORDS: Occipital bone, inter parietal bone, WS-wormian bone.

INTRODUCTION

The human skull is made up of 22 bones which are classified into two types neurocanium and viscerocranium. Occurrences of the accessory bones are very rare. Accessory bones which are appear in the neuro-cranium of the skull is called inca bone .The squamous part of parietal bone and supra region squamous part of occipital bone ossify forms inca bone or inter parietal bone above in the location of lambda suture. Bones which are irregular in size, fusion ,shape, and numbers . Normally, they are present in or near the suture or occipito fontanels of neonatal skulls. The main common_etiology of the bone was unknown.

Aim

This study is to find the incidence of inter parietal/inca bone which is present in the natives of southern part of tamilnadu region .

MATERIALS USED

In the present study were examined during routine, osteology demonstration for I year BDS at Sri Ramakrishna dental college and hospitals, Coimbatore, Tamilnadu. A total number of 100 dried skulls were examined. Few skulls were found with variations, there is a presence of inter parietal bone or inca bone. The following parameters were evaluated in the present study:

- a. Percentage of skulls inter parietal bone were present
- b. sutures in the skulls

RESULTS

In the present study, the overall incidence 3 was seen in 100skulls [Table1] [figure 2] [figure 3] and the highest number of inca is observed along the lamboid suture. The data are statistically analyzed. The P value obtained is 0.802 which is insignificant.

Table 1:

No of bones	100	sutures	
Normal	97	Above lambda	3
Variations	3	Within lambda	0

Anatomical Variation in South Indian Population in the Parietal Bones: Wormian Bone/Inca Bone



Figure 1: Dried skull Norma occipitalis view

Variations of the skull: inca bone or interparietal bone

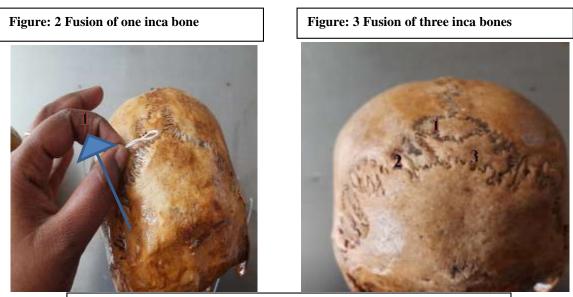


Figure 4: Comparsion of normal dried skull with inter parietal bone

Anatomical Variation in South Indian Population in the Parietal Bones: Wormian Bone/Inca Bone



DISCUSSIONS

In the current study, we observed an incidence rate of 3% variations were noted in the skulls as inter-parietal bone. It is more frequent at the lambdoid suture. Multiple fusion of bone above the occipital bone is called interparietal bone. It is commonly called sutural bones or wormian bones or inca bone. It appears there is no clinical significance being rather than pathologically aeitology. Meticulous knowledge regarding gross incidence ,number of inca-ossicles in the south indian population may be useful to neurosurgeons, orthopedic surgeons, anthrologists and radiologist

REFERENCS

- 1) Grays anatomy 40th edition
- Krogman WM. The Human Skeleton in Forensic Medicine. 3rd ed. Springfield: Charles C Thomas; 1978. pp. 3
- Barberini F, Bruner E, Cartolari R, Franchitto G, Heyn R, Ricci F, et al. An unusually-wide human bregmatic wormian bone: Anatomy, tomographic description, and possible significance. Surg Radiol Anat. 2008;30:683–7.

- Srivastava HC. Ossification of the membranous portion of the squamous part of the occipital bone in man. J Anat. 1992;180(Pt 2):219–24.
- Hess L. Ossicula wormiana. Hum Biol. 1946;18:61– 80. [PubMed] [Google Scholar]
- Murphy T. The pterion in the Australian aborigine. Am J Phys Anthropol. 1956;14:225– 44. [PubMed] [Google Scholar]
- Pal GP. Variations of the interparietal bone in man. J Anat. 1987;152:205–8.
 [PMC free article] [PubMed] [Google Scholar]
- Pryles CV, Khan AJ. Wormian bones. A marker of CNS abnormality? Am J Dis Child. 1979;133:380– 2. <u>PubMed</u>
- Jeanty P, Silva SR, Turner C. Prenatal diagnosis of wormian bones. J Ultrasound Med. 2000;19:863–9.
- 10) 10. Wilczak CA, Ousley SD. Test of the relationship between sutural ossicles and cultural cranial deformation: Results from Hawikuh, New Mexico. Am J Phys Anthropol. 2009;139:483