# A Study Of Ossicle At Asterion In Western U.P. Of North Indian Crania

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**Abstracts:** Background: Studies of non metric cranial variants have been a field of considerable interest to research workers especially because of their racial and regional importance. Methodology: Total of 28 north Indian human crania of western U.P. was studied for the incidence of Ossicle at Asterion a cranial variant. Results: Ossicle at Asterion was found in 4 (14.2%) of total human crania. Conclusion: The presence of Ossicle at Asterion found to be of considerable regional and racial significance. [Kumar S NJIRM 2015; 6(6):61-62]

**Key Words**: Ossicle at Asterion,cranial variant

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**Introduction:** A sutural bone may be present at the Asterion the meeting point of occipital, parietal and mastoid part of temporal bones.

Non-metric cranial variants have been a subject of study by many pioneering workers Todd and Tracy[1] Many such variants have been observed on a racial basis also Berry and Berry[2] and are of considerable ethnic but lesser forensic interest. Berry[3] made a special study of non meterical human cranial variants including ossicle at Asterion. Present study is undertaken to know the incidence of variant of ossicle at Asterion and to draw significant conclusion, if any, from this study.

**Material and Methods:** 28 north Indian human crania were studied for this study. Human crania of museum of Rohilkhand medical college Bareilly were studied.Incidence of ossicle at Asterion was noted in these crania.

**Figure 1: Arrow shows ossicle at asterion**

**Result:** The Ossicle at Asterion is often present and it was noted in 14.2% skull in the museum of anatomy department of rohilkhand medical college, bareilly. It was seen in 4 skull out of 28 skull.

**Table 1: Ossicle at Asterion (comparision with others studies)**

| Workers | Global regions | Skull studied | Incidence % |
|---|---|---|---|
| Berry | Egypt (summed) | 250 | 12.9 |
| | Palestine (Lachish) | 54 | 6.5 |
| | Nigeria (Ashanti) | 56 | 14.3 |
| | India (Punjab) | 53 | 8.5 |
| | Palestine (Modern) | 18 | 8.3 |
| | Burma | 51 | 9.8 |
| | North America (British Columbia) | 50 | 19 |
| | South America (Peru) | 53 | 14.2 |
| SHH Zaidi | | 28 | 14.2 |

**Discussion:** Cranial variants have aroused the curiosity of anatomists for many decades .Le Double[4] .It was Wood Jones[5],however who first proposed that the differing incidences of these minor variants which occurred in different races might be useful in anthropological studies. Laughlin and Jorgensen[6] put this idea in practice .Berry and Berry[2] suggested that a wide range of these variants could be used to calculate a distance statistic between population samples.

This paper is concerned with description and racial & regional incidence of ossicle at Asterion, one of the important cranial variant. Cranial variants like all other variants have been studied by many workers; most of

them are recognized only by mention in anatomical text books, being described in terms such as rare or occasionally found; nevertheless a few of them have been utilized as anthropological markers. Broth well[7,8].Some variants are consequences of disease or other extrinsic influences Moller christensen and Sandison[9] ,Roche [10] and Dorsey [11],however most of these variants result from normal developmental processes and are genetically determined Berry & Berry[2].

The frequency of any particular variant is more or less constant in a given race and is somewhat similar in related races. Chambellan [12] seems to have been first to suggest the possibility of using such traits as anthropological characters. Russel[13] gathered together data on a number of skull variants in American group and gave the first indication of their use in the comparison of populations .Woodjones[14] used data on skull variants in a more systemic comparison number of far eastern group.

Berry [3] made a special study of non – metrical human cranial variations including Ossicle at Asterion. His findings are given in the table no.1 In our study It was observed that Ossicle at Asterion was present in 14.2% of crania. Hence the current study provides valuable data from western U.P. the largest state of India, and compares the same with data of different global regions.

The findings are of considerable racial and regional global significance.

**Conclusion:** After comparison with available data of other races and regions, we have seen that there is significant difference in incidence of Ossicle at Asterion in western U.P in North India then the incidence in other global region; hence we believe that the knowledge of incidence of Ossicle at Asterion is of importance to the anthropologists, neuro anatomist, neurosurgeons, radiologists, morphologists.

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