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Research Article

# A STUDY OF CORONAL OSSICLE IN NORTH INDIAN CRANIA

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#### **ABSTRACT**

Coronal ossicle, a cranial variant is an ossicle often present at coronal suture studies of non metric cranial variants have been a field of considerable interest to research workers especially because of their racial and regional importance. 28 north Indian skulls in the Department of Anatomy, RMCH, Bareilly, U.P. are studied for the coronal ossicle, a cranial variant in the present study. Findings are discussed and compared with other global studies and are found to be of considerable regional and racial significance.

Keywords: Coronal Ossicle, Cranial Variant, Human Crania

#### INTRODUCTION

Coronal ossicle, a cranial variant is an ossicle often present at coronal suture. Non-metric cranial variants have been a subject of study by many pioneering workers (Todd and Tracy, 1930). Many such variants have been observed on a racial basis also (Berry and Berry, 1967) and are of considerable ethnic but lesser forensic interest. Berry (1975) made a special study of non metrical human cranial variants including accessory lesser palatine foramina.

Present study is undertaken to know the incidence of variant of accessory lesser palatine foramina and to draw significant conclusion, if any, from this study.

## MATERIALS AND METHODS

28 north Indian human crania were studied for this study. Human crania in the museum of department of Anatomy at Rohilkhand medical college Bareilly were studied.

Incidence of coronal ossicle was noted in these crania.

# RESULTS AND DISCUSSION

#### Results

Out of 28 skulls studied coronal ossicle was seen only in 2 skulls (7.1%)

#### Discussion

Cranial variants have aroused the curiosity of anatomists for many decades (e.g. Le Double, 1903). It was Wood (1930-1), however who first proposed that the differing incidences of these minor variants which occurred in different races might be useful in anthropological studies. Laughlin & Jorgensen (1956) put this idea in practice and Berry & Berry (1967) 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 coronal ossicle, 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, 1963, 1965). Some variants are consequences of disease or other extrinsic influences (Moller-christensen & Sandison, 1963; Roche, 1964; Dorsey, 1897); however most of these variants result from normal developmental processes and are genetically determined (Berry & Berry, 1967).

The frequency of any particular variant is more or less constant in a given rare and is somewhat similar in related races. Chambellan (1883) seems to have been first to suggest the possibility of using such traits as anthropological characters.

Russel (1900) 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 .Wood (1930-31, 1933-34) used data on skull variants in a more systemic comparison number of far eastern group.

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Berry (1975) made a special study of non metrical human cranial variations. His findings are given in the table no.1

In our study: It was observed that coronal ossicle was present in 7.1% of crania.



Figure 1: Photograph of Human dry skull showing coronal ossicle

Hence the current study provides valuable data from 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.

| Table | 1. | (RERRY | V_1975       | coronal    | ossicle |
|-------|----|--------|--------------|------------|---------|
| 1 ame | 1. |        | 1 - 1 7 / .7 | i coi onai | OSSICIE |

| Egypt    | Nigeria   | Palestine | Palestine | India    | Burma  | North                            | South             | Our study                     |
|----------|-----------|-----------|-----------|----------|--------|----------------------------------|-------------------|-------------------------------|
| (summed) | (Ashanti) | (Lachish) | (Modern)  | (Punjab) |        | America<br>(British<br>Columbia) | America<br>(Peru) | (U.P)<br>North<br>India<br>28 |
| 250      | 56        | 54        | 18        | 53       | 51     | 50                               | 53                | skulls                        |
| Skulls   | skulls    | skulls    | Skulls    | skulls   | skulls | skulls                           | skulls            |                               |
|          |           |           |           |          |        |                                  |                   |                               |
| 2.6%     | 0%        | 3.7%      | 0%        | 1.9%     | 1%     | 32%                              | 1.9%              | 7.1%                          |

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