

**Research Article**

## **A STUDY OF FORAMEN OF HUSCHKE IN NORTH INDIAN CRANIA**

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### **ABSTRACT**

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 from the state of Uttar Pradesh (U.P.) were studied for the foramen of Huschke, 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:** *Foramen of Huschke, Cranial Variant, Human Crania, External Auditory Meatus*

### **INTRODUCTION**

A foramen often present in the floor of external auditory meatus is known as foramen of Huschke. It is a usual feature in young children only.

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 foramen of Huschke (Figure 1).

Present study is undertaken to know the incidence of a variant of foramen of Huschke 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 of Museum of Rohilkhand Medical College & Hospital, Bareilly were studied.

Incidence of foramen of Huschke was noted in these crania.

### **RESULTS AND DISCUSSION**

#### **Results**

Out of 28 skulls studied foramen of Huschke was seen only in 3 skulls (10.7% cases)

#### **Discussion**

Cranial variants have aroused the curiosity of anatomists for many decades (e.g. Le Double, 1903). It was Wood (1930), 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 foramen of Huschke, 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 and 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 race 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. Woodjones (1930-31, 1933-34) used data on skull variants in a more systemic comparison number of far eastern group.

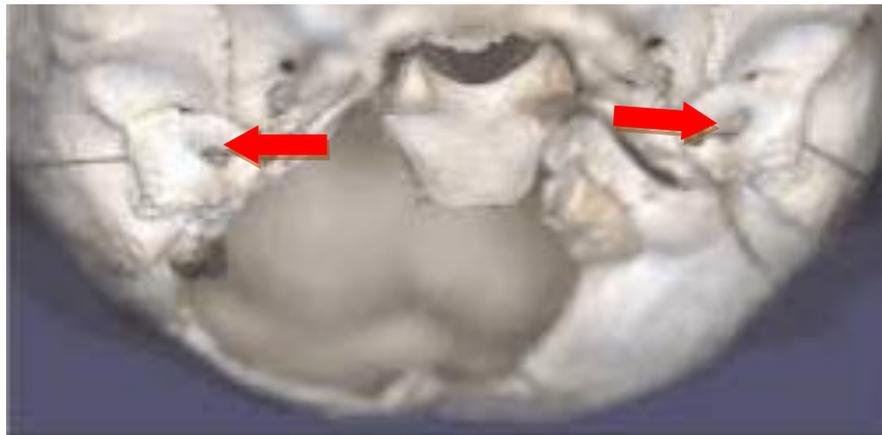
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Berry (1975) made a special study of non metrical human cranial variations including foramen of Huschke. His findings are given in the table 1.

In our study: It was observed that foramen of Huschke was present in 10.7% of crania (Figure 2).



**Figure 1: Photo of adult subject dry skull showing foramen of Huschke (pin arrow)**



**Figure 2: Photo of adult dry skull showing Bilateral foramen of Huschke (arrow head)**

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, regional and global significance.

**Table 1: BERRY-1975 Foramen of Huschke**

<b>Egypt (summed )</b>	<b>Nigeria (Ashanti)</b>	<b>Palestine (Lachish)</b>	<b>Palestine (Modern)</b>	<b>India (Punjab )</b>	<b>Burm a</b>	<b>North America (British Columbi a)</b>	<b>South Americ a (Peru)</b>	<b>Our study (U.P) North India</b>
<b>250 skulls</b>	<b>56 skulls</b>	<b>54 skulls</b>	<b>18 skulls</b>	<b>53 skulls</b>	<b>51 skulls</b>	<b>50 skulls</b>	<b>53 skulls</b>	<b>28 skulls</b>
14%	30.4%	18.9%	6%	22.6%	24.5%	32%	46.3%	10.7%

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