

A Study of Precondylar Tubercle in North Indian Crania

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ABSTRACT

Studies of nonmetric cranial variants have been a field of major interest to all the research workers, especially, because of their racial and regional importance. Twenty eight North Indian skulls of patients from Uttar Pradesh were studied for the precondylar tubercle, a cranial variant in the present study. The findings are documented, discussed, and compared with other studies from different parts of the world and are found to be of considerable regional and racial significance.

Keywords: Anthropological characters, Cranial variant, Precondylar tubercle, Races.

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INTRODUCTION

Occasionally, a bony tubercle lies immediately anterior and medial to occipital condyles, the precondylar tubercle. A centrally placed tubercle is regarded as two fused tubercles.

Nonmetric cranial variants have been a subject of study by many esteemed.¹ Many such variants have been observed on a racial basis also and are of considerable ethnic interest but lesser of forensic significance.² Berry³ made a special study of nonmetrical human cranial variants.

The present study is undertaken to know the incidence of variant of precondylar tubercle and to draw significant conclusion, if any, from this study.

MATERIALS AND METHODS

Twenty eight North Indian human crania were studied, which were obtained from Anatomy Museum of Rohilkhand Medical College, Bareilly.

Incidence of precondylar tubercle was noted in these crania (Fig. 1).

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RESULTS

Out of 28 skulls studied, precondylar tubercle was not seen in two skulls. Thus 7.1% was the incidence of this cranial variant.

DISCUSSION

Cranial variants have aroused the curiosity of anatomists for many decades.⁴ It was Wood-Jones,⁵ who first proposed that the differing incidences of these minor variants which occurred in different races might be useful in anthropological studies. Laughlin and Jorgensen⁶ put this idea in practice and Berry and Berry² 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 and regional incidence of precondylar tubercle as one of the important cranial variant.

Cranial variants like all other variants have been studied by many workers; most of them are recognized only in anatomical text books, being described in terms, such as rare or occasionally found; nevertheless, a few of them have been utilized as anthropological.^{7,8} Some variants are consequences of disease or other extrinsic influences⁹⁻¹¹; however, most of these variants result from normal developmental processes and are genetically determined.²

In a given race, the frequency of any particular variant is more or less constant race and is somewhat similar in related races. Chambellan¹² seems to have been first to

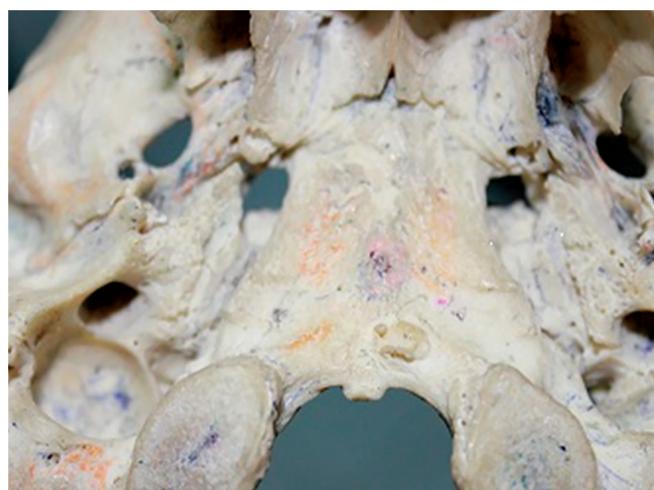


Fig. 1: Precondylar tubercle in crania

Table 1: Variations in nonmetrical human cranium³

<i>Egypt (summed)</i>	<i>Nigeria (Ashanti)</i>	<i>Palestine (Lachish)</i>	<i>Palestine (Modern)</i>	<i>India (Punjab)</i>	<i>Burma</i>	<i>North America (British Columbia)</i>	<i>South America (Peru)</i>	<i>Our study (U.P.) North India</i>
34/496 skulls	2/112 skulls	6/106 skulls	0/32 skulls	6/106 skulls	10/102 skulls	0/98 skulls	0/106 skulls	2/28 skulls
6.9%	1.8%	5.6%	0%	5.6%	9.8%	0%	0%	7.1%

suggest the possibility of using such traits as anthropological characters.

Russel in 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^{5,13} used data on skull variants in a more systematic comparison number of far eastern group.

Berry³ made a special study of nonmetrical human cranial variations, and his findings are given in Table 1.

In our study, it was observed that precondylar tubercle was present in two crania. Hence, the current study provides valuable data from Uttar Pradesh, the largest state of India, and compares the same with data from different parts of the world.

The findings are of considerable racial and regional global significance.

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