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A NOTE ON THE VARIATION OF OCCIPITAL HAIR WHORL

ABSTRACT — *An attempt has been made to study the mode of distribution of different types of occipital hair whorl among the Brahmin, Kaibarta and the Ahom of Assam. For this 401 individuals have been examined. The data have been compared with some other populations of Assam.*

KEY WORDS: *Occipital hair whorl — Brahmin — Kaibarta — Ahom — Assam — India.*

INTRODUCTION

In most people near the occiput of the head there is a crown or whorl of hair. Since long past the occipital hair whorl has been taken as an important tool in population variation studies for its simplicity in diagnosis and existence of variation among the populations. Usually the hair whorl is one and has two phenotypic variations i.e. it may turn to the right (clockwise represented by + sign) or to the left (anticlockwise represented by - sign). Occasionally a person has double whorls. Double whorls -- and ++ are very rare and - + is much more frequent than + - (cited from Gates: 1959). However, three or four whorls have also been reported in extremely few cases.

Very little is known regarding the occurrence of different types of whorl in various populations of India in general and of Assam in particular. Only a few populations of Assam have been investigated for this trait so far. Special mention can be made of the researches conducted by Das (1956 and 1959), Das and Deka (1960), Sharma (1961), Das and Das (1967), Dutta (1980), Sengupta and Ahmed Das (1978-1979) and Sengupta (1984) in this context.

The present note makes an attempt to analyse and interpret variation in respect of occipital hair whorl in three endogamous populations viz the Brah-

min, the Kaibarta and the Ahom of Dibrugarh district, upper Assam. The Brahmin and the Kaibarta are the two populous castes of Assam whereas the Ahom are a mongoloid population who migrated to Assam from Burma in the early part of the 13th century.

MATERIAL AND METHODS

The investigation was carried out on 401 male individuals between the ages of 10 to 25 years from Dibrugarh town and its neighbouring villages in upper Assam. The sample comprises Brahmin = 90, Kaibarta = 140 and Ahom = 171. While selecting the subjects every care has been taken to exclude closely related individuals to make the data more representative and to have a wider coverage. The present data have been compared with some other populations of Assam. However, no test of significance was applied to examine the extent of variation.

RESULTS AND DISCUSSION

Single clockwise (+) whorl predominates in all the populations. Its frequency is much higher in Brahmin (81.11%) and Ahom (70.76%) in comparison to that in Kaibarta (72.9%). A reverse picture is observed in case of single anticlockwise (-) whorl,

TABLE 1. Percentage distribution of occipital hair whorl in various populations of Assam

Populations	n	Single		Double			Source
		+	-	+ +	- -	+ -	
<i>Caucasoid</i>							
Brahmin	90	81.1	17.8	0	0	1.1	Present study
Kaibarta	140	72.9	24.3	0	0	2.8	Present study
Kalita	100	75.0	20.0	1.0	4.0	0	Das & Das 1967
Suri	105	63.8	33.3	0.9	0	1.9	Das & Deka 1960
Kaibarta	100	64.0	31.0	2.0	2.0	1.0	Das 1967
Rajbansi	100	69.0	22.0	3.0	0	6.0	Das 1959
<i>Mongoloid</i>							
Ahom	171	70.7	19.2	2.3	0.5	7.0	Present study
Kachari	85	70.6	22.4	2.4	0	4.7	Das 1959
Pati Rabha	120	67.5	21.6	4.1	0.8	5.8	Das 1956
Ahom	41	46.3	36.6	0	0	17.1	Das & Pakrasi*
Miri	100	86.0	10.0	0	1.0	3.0	Sharma 1961
Deuri	139	74.1	22.3	2.2	0	0.7	Sengupta 1984
						(0.7)	1984
Ahom	100	76.0	16.0	1.0	0	7.0	Dutta 1980
Mishing	152	69.7	27.6	0.6	0.6	1.3	Sengupta 1984

* cited from Das and Das 1967.

Figure within the parantheses shows the frequency of tripple hair whorl (- + -) in Deuri.

which is comparatively higher in Kaibarta (24.3%). In the relative occurrence of single and double whorl the Brahmin and the Kaibarta show a close approximation to each other. But the Ahom are quite different from them in having more double number of whorls. Of the three types of double whorl the combination of one clockwise and the other anticlockwise is more frequent in the populations under consideration.

Biswas (1953) observed that the anticlockwise hair whorl occur in higher percentage among the Mongoloid populations. But a similar picture is not observed when all the data included in Table 1 are taken into account. One thing appears to be noteworthy. Double whorl occurs in higher frequency among the Mongoloids than among the Caucasoid populations under consideration, except that of Rajbansi (Koch).

The population group Rajbansi (Koch) actually consists of people of different tribal groups who have been converted to Hinduism and the ethnic character of the group has been a matter of some controversy. There are grounds for suspecting some admixture of Mongoloid blood (Risley: 1891; Sengupta 1987).

It is interesting to note that the present Ahom data are quite different from that reported by Das and Pakrasi (cited from Das and Das 1967), but the later sample have limited anthropological value because the small size of the sample limits their comparability.

ACKNOWLEDGEMENT

The author wish to thank Mrs. Kaveeta Sengupta (Barua) for kindly typing the paper in time. Sincere thanks are conveyed to Mr. J. L. Sharma and Mr. P. Bora who generously extended their help in carrying out this study.

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