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**EARLOBE TYPES AMONG THE BHOKSAS;
A MONGOLOID POPULATION OF UTTAR
PRADESH (INDIA)**

Abstract — Types of earlobe have been investigated on a sample of 100 males and 96 females of the Bhoksas a mongoloid population from the village Bazpur in Uttar Pradesh. The results are discussed and compared with other populations from India.

Introduction

As early as 1922 Hilden suggested that the inheritance of free earlobe is determined by an autosomal gene. Since then this postulate has been supported and refuted. Quelprud (1934), Powella and Whitney (1939), Suzuki (1950), and Wiener (1937) have added complexity to the problem. There is however no doubt that attachment of the earlobe is hereditary and that this trait can be used to study the population variation.

In the present paper an attempt has been made to study the earlobe types in the Bhoksas, a mongoloid population of village Bazpur (U.P.), India. The results will be compared with other population samples from India.

Material and method

The data for the present paper were collected from the village Bazpur in the Nanital District of Uttar Pradesh (India). They consist of 100 male and 96 female Bhoksas. The probands were selected at random. Every care was taken to avoid related individuals. Earlobe types were recorded under following three heads 1. Free 2. Attached 3. Semi-attached.

Results and discussion

Table 1 presents the absolute number and percentage of three types of earlobe viz. attached, semi-attached and free among the Bhoksas of Bazpur (Uttar Pradesh). From the

TABLE 1. Earlobe types in Bhoksas

Popula- tion	Sex	Sample size	Attached		Semi- attached		Free	
			No.	%	No.	%	No.	%
Bhoksas	Male	100	38	38.00	54	54.00	8	8.00
	Female	96	35	36.40	55	57.20	6	6.20
Total (Male + Female)		196	73	37.20	109	55.60	14	7.10

$\chi^2 = 0.516, df = 2, p = 0.80 > p > 0.70$

table it is evident that males have 38.00 % attached, 54.00 % semi-attached and 8.00 % free earlobes, whereas females have 36.40 %, 57.20 % and 6.20 % respectively and there is very low variation so far as percentages distribution of three types of earlobe among the two sexes are observed. The above fact is also supported by χ^2 test ($\chi^2 = 0.516, df = 2, p = 0.80 > p > 0.70$) which shows a very low value.

Comparing the attachment of earlobes of Bhoksas with the other populations listed in Table 2 we find that Bhoksas males have a higher percentage of attached earlobe: Suris 21.00 %, Bengalis (Gaudha Benike) 24.00 %, Kalita > 23.30 %, Chamars 12.96 %, Brahmins 14.43 %, Rabhas 23.70 %, Kacharis 34.00 %, Rajbashes 26.00 %, Yadavas 28.40 %, Pasis 23.40 %, Gaur Brahmins 20.00 % and Chaudhari Jats 17.10 %, but they have a lower percentage of attached earlobe than Rajputs (Lucknow) 55.50 %, Milo Baris 45.33 %, Gadariyas 39.00 %, Srivastavas 41.30 %, Agarwals 41.02 %, Rajputs 55.50 %, Saryupari Brahmins 54.86 %, Garo males 46.50 % and Kanyakubja Brahmins 54.86 %. Bhoksa females have a higher percentage of attached earlobe than Chaudhary Jats 12.00 %, Gaur Brahmins 17.10 %, Pasis 20.00 %, Srivastavas 34.21 %, but have a lower percentage than Kanyakubja Brahmins 48.54 %, Saryupari Brahmins 40.15 %, Rajputs 52.12 %, Agarwals 41.50 %, Yadavas 37.00 %, Gadariyas 40.00 % and Rajputs of Lucknow 53.12 %. So far as the semi-attached type of earlobe is concerned Bhoksas males have a higher percentage than Garos 26.50 %, Kacharis 32.00 %, Rajbashes 28.00 %, Kanyakubja Brahmins 31.32 %, Saryupari Brahmins 30.64 %, Rajputs 25.92 %, Agarwals 33.33 %, Srivastavas 32.60 %, Yadavas 23.80 %, Gadariyas 29.30 %, Pasis 27.80 %, Rajputs of Lucknow 25.93 %, Suris 24.00 %, Bengalis (Gaudha Banike) 23.00 %, Kalitas 21.70 %, Milo Baris 34.45 %, Chamars 37.04 %, Brahmins 21.65 % and Rabha males 53.30 % but have a lower percentage than Gaur Brahmins 77.50 % and Chaudhary Jats (Males) 80.00 %. Females Bhoksas have a higher percentage of semi-attached earlobe than Kanyakubja Brahmins 32.25 %, Saryupari Brahmins 37.46 %, Rajputs 25.00 % Agarwals 40.00 %, Srivastavas 38.14 %, Yadavas 36.00 %, Gadariyas 15.00 %, Pasis 20.00 % and Rajputs of Lucknow 25.00 % and have a lower percentage than Gaur Brahmins 82.90 %, and Chaudhary Jats 88.00 %.

In case of free types of earlobe the male Bhoksas have a higher percentage than Gaur Brahmins 2.50 % and Chaudhary Jats 2.90 % and have a lower percentage than other populations listed in Table 2. In case of female Bhoksas the percentage of free earlobe type is lower than other populations except Gaur Brahmins where percentage of free earlobe is completely absent.

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TABLE 2. Percentage of earlobe attachment among various Indian populations

Population	Sex	Sample size	Attached	Semi-attached	Free	Author
Suris (Assam)	M	100	21.0	24.0	55.0	Das & Deka 1960
Kalitas (Assam)	M	120	23.3	21.7	55.0	Das 1964
Rabhās (Assam)	M	300	23.7	53.3	18.0	Das 1967
Garos (Assam)	M	200	46.5	26.5	27.0	Das 1967
Kacharis (Assam)	M	100	34.0	32.0	32.0	Das 1967
Raj Bashis (Assam)	M	100	26.0	28.0	46.0	Das 1967
Bengalis (Gaudha Benike)	M	100	24.0	23.0	43.0	Dutta and Ganguly 1965
Chamars (M. P.)	M	54	12.96	37.04	50.0	Dutta and Ganguly 1965
Brahmins (M. P.)	M	97	14.43	21.65	63.92	Dutta and Ganguly 1965
Milo Baris	M	428	45.33	34.35	20.23	Dutta and Ganguly 1965
Kanyakubja	M	83	44.57	31.32	24.09	Gupta 1971
Brahmins	F	62	48.54	32.25	24.19	Gupta 1971
Saryupari	M	62	54.86	30.64	14.51	Gupta 1971
Brahmins	F	52	40.15	37.46	15.38	Gupta 1971
Rajputs	M	54	55.50	25.92	18.50	Gupta 1971
	F	52	52.12	25.00	21.70	Gupta 1971
Agarwals	M	39	41.02	33.33	25.60	Gupta 1971
	F	65	41.50	40.00	18.50	Gupta 1971
Srivastavas	M	46	41.30	32.60	21.10	Gupta 1971
	F	76	34.21	38.15	27.60	Gupta 1971
Yadavas	M	154	28.40	23.00	47.80	Srivastava 1973
	F	50	37.00	36.00	28.00	Srivastava 1973
Gadariyas	M	41	39.00	29.30	31.70	Srivastava 1973
	F	20	40.00	15.00	45.00	Srivastava 1973
Pasis	M	154	23.40	27.80	46.80	Srivastava 1973
	F	50	22.00	20.00	58.00	Srivastava 1973
Gaur Brahmins	M	160	20.00	77.50	2.50	Gupta 1974
	F	140	17.10	82.90	—	Gupta 1974
Chaudhary Jats	M	140	17.10	80.00	2.90	Gupta 1974
	F	80	12.00	88.00	—	Gupta 1974
Rajputs of Lucknow	M	54	55.50	25.92	18.51	Tewari 1971
	F	52	53.12	25.00	27.87	Tewari 1971
Bhoksas	M	100	38.00	54.00	8.00	Present study
	F	96	36.40	57.20	6.20	Present study

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