

Frequency of Hypertrichosis Among Oraons of Purnea, Bihar

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data on hypertrichosis of ear among the Oraons of Purnea, Bihar

ABSTRACT Hypertrichosis among Oraons of Purnea was studied. Hypertrichosis of ears among Oraons have a frequency of 15.55% (hairy helix 5.18%, tragus hair 7.40% and ear lobe 2.96%) which is similar to Indian populations. The frequency of hypertrichosis in North and Central India is comparatively lower than in South India.

INTRODUCTION

The Oraons are a Dravidian tribe and form a second major tribe next of the Santals in Bihar. They are endogamous and largely found in the districts of Palamau, Hazaribagh, Ranchi and Purnea. Kirk et al. (1962) concluded that genetically the Oraons are not closely related to other Pre-Dravidian stock in India at present. They have migrated to Purnea nearly 300 years ago from Chotanagpur (Pandey et al., 1993).

Hypertrichosis is a Y- linked character (Gates, 1960; Gates and Bhaduri, 1961; Gates et al., 1962; Dronamraju, 1960, 1964; Dronamraju and Haldane, 1962, 1963; Chattopadhyay, 1966 and Deka and Pattojoshi, 1975). Occurrence of a large number of males and no female with true hairs, analysis in the world, support Y-linked hypothesis for this trait. However, Chaurasia and Goswami (1971) have reported female with hairy ear rims. Rao (1970) has expressed two gene hypothesis according to which even females can express, while the trait gene is still Y-linked. This trait is seen rather frequently in India, but also occurs in Caucasians, Australian aborigines and Japanese. A large number of studies have been carried out to show the genetics and variability in different population for this particular trait. But in the tribes of Purnea division, This type of study is yet to be carried out. The purpose of the present paper is to report the

MATERIALS AND METHODS

135 unrelated adult males aged between 17 to 80 years were observed for the present study. The investigation was carried out in different villages of Purnea district. Presence or absence of hair on four regions (auditory meatus, the tragus, the lobules and the helix) of both ears was recorded separately. Methodology of Malhotra (1969) "that all men with one or more hairs on any part of ear should be classified as affected" was followed.

RESULT AND DISCUSSION

Table 1 shows the frequency of affected persons. It is noted that fraction affected on helix, tragus and lobe increases with increasing age. Such result have been also reported by Dronamraju (1963b), Slatis and Apelbaum (1963) and Stern et al. (1964). Out of 135 males, 5.18% were found to have hairy helix, 7.40% have tragus hair and 2.96% have hairs on the ear lobe (Table 1). It is to be noted that presence of hair is observed more often on tragus than helix. The age of the onset of hypertrichosis on different areas of is found 40 years for tragus, 42 years for helix and 55 years of the lobe. Deka and Pattojoshi (1975) have reported the presence of this trait on one ear in their study of Gadaba of Orissa. However, no such case was found in the present investigation. It is observed that fraction affected on helix, tragus and lobe increases with increase in age.

Little information regarding this trait is available among those of Negroid and Mongoloid origins. Gates et al. (1962) studied Mongoloid

groups (Lepchas, Bhotias, Tibetan-refugees, Khasis and Totos), but did not find any affected individual. However, Chakarvarti (1964) reported two individuals having hairy rims among the Totos, a tribe with Mongoloid affinity of Jalpiaguri (West Bengal), Chattopadhyay (1962) observed 15 Negroes but none was found to be affected. Gates and Vella (1962) found this trait in 25 Maltese males. It may be inferred that Mongoloid people possess very low frequency or lack this trait (Garg, 1980). Guha (1951) considers that the Oraons are related to the Proto-Australoid stock. In the present study among Oraons the frequency is 15.55 per cent.

Table 2 : Frequency of hypertrichosis of the ear among Oraons by age groups

Age group	Tragus			Lobe			Helix		
	1	2	3	1	2	3	1	2	3
17-19	-	5	-	-	5	-	-	5	-
20-29	-	20	-	-	20	-	-	20	-
30-39	-	35	-	-	35	-	-	35	-
40-49	4	36	0.100	-	40	-	3	37	0.075
50-59	3	12	0.200	2	13	0.133	2	13	0.133
60-69	2	8	0.200	2	8	0.200	2	8	0.200
70-above	1	9	0.100	-	10	-	-	10	-
Total	10	125	0.600	4	131	0.333	7	128	0.408

1. Affected 2. Unaffected 3. Fraction affected

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Table 1: Frequency of hairy helix tragus and ear lobe in Oraon males

Type	Observed Number	Affected		Unaffected	
		n	%	n	%
Hairy helix	135	7	5.18	128	94.81
Tragus hair	135	10	7.40	125	92.59
Hairs on the ear lobe	135	4	2.96	131	97.03
Total	135	21	15.55	114	84.45