PRINT: ISSN 0972-0073 ONLINE: ISSN 2456-6802
Anthropologist, 1(4): 285-286 (1999)
DOI: 10.31901/24566802.1999/01.04.12

A Short Note on the Palmar C Line Polymorphism Among the Ahom of Dibrugarh District, Assam

Pinuma Baruah

Anthropological Survey of India, Shillong 793001, Meghalaya, India

KEY WORDS Palmar Dermatoglyphics. C Line. Ahom. Assam.

ABSTRACT This present paper records the distribution of C line termination among the Ahom of Dibrugarh district, Assam. The C line terminates frequently on ulnar side and no significant bisexual difference are observed. Only females show significant bilateral difference.

INTRODUCTION

It was Rife (1968) who first pointed out the use of palmar C line termination in population discrimination. Palmar C line polymorphism also exhibits both qualitative and quantitative variation in Population studies. Plato (1970) classified the C line termination as Ulnar, Radial, Proximal and Absent.

The present paper is an attempt to study the incidence of C line termination among the Ahom of Dibrugarh district, Assam. The Ahom are one of the important Mongoloid population of Assam. They entered Assam from Myanmar (Burma) in the 13th century and settled in the upper Assam. At present they are found in the districts of Dibrugarh, Lakhimpur, Sibsagar, Tinsukia and Jorhat.

MATERIAL AND METHODS

The subjects for the present study comprised of 100 unrelated Ahom individuals (50 males and 50 females) studied in 1993 from Borpatherc Dighala Gaon of Dibrugarh District, Assam. The method employed here for obtaining print was that of Cummins and Midlo (1961) and C lines were analysed following Plato's (1970).

Chi square test has been applied to find out the bisexual and bilateral variation.

RESULTS AND DISCUSSION

The frequency distribution of C line termination among Ahom population is presented in table 1. It reveals from the table that Ulnar type of termination is found frequently, followed by radial type in both the sexes. Furthermore, the left hand posses more number of ulnar type of termination in comparison to the right hand, whereas the radial type of termination tend to occur more frequently in right hand. In case of Right hand the highest frequency of ulnar type of c line termination is found in Ahom males (68 %). In both the sexes the left hand posses equal numbers of Ulnar (82%) and radial types (12%) of C line terminations. The males show equal frequency of proximal type (2%) in both the hands. It has been observed that there is no proximal type of termination in right hand of females. The absent type is observed in equal frequency (2%) in their right hand in both the sexes.

In N.E. India, earlier Das and Sengupta (1985) have reported the predominance of Ulnar

Table 1: Percentage frequency of the model types of palmar C line among the Ahom

Sex	*Model*	*Palm*		
	C line	*Right*	*left*	*Right+Left*
Male	Ulnar	34 (68)	41 (82)	75 (75)
	Radial	14 (28)	6 (12)	20 (20)
	proximal	1 (2)	1 (2)	2 (2)
	Absent	1 (2)	2 (4)	3 (3)
	Total	50 (100)	50 (100)	100 (100)
Female	Ulnar	30 (60)	41 (82)	71 (71)
	Raidal	19 (38)	6 (12)	25 (25)
	proximal	0 (0)	2 (4)	2 (2)
	Absent	1 (2)	1 (2)	2 (2)
Male & Female	Total	50 (100)	50 (100)	100 (100)

Figures in parenthesis indicate percentage
χ^2 test of significance (at 3 d.f)

Bilateral difference	: Male	χ^2	= 4.19
	Female	χ^2	= 10.5*
Bisexual difference	: Right	χ^2	= 2.01
	Left	χ^2	= 0.68
	Right & Left	χ^2	= 0.866

(*Statistically significant at 5% level of probability)

type of termination. This present findings is also in accordance with their study.

The Chi square test indicates no bisexual difference in regard to C line polymorphism among the Ahom. Statistical bilateral differences are observed in the females only.

REFERENCES

Cummins, H. and Midlo, C.: *Finger prints, Palms and Soles: An Introduction to Dermatoglyphics.* Dover Publication, New York (1961).

Das, B.M. and Sengupta, S.: Variation in palmar C line termination polymorphism among some endogamous groups of Assam. *Anthropologie,* **23**: 97-100 (1985).

Plato, C.C.: Polymorphism of the C line of palmar dermatoglyphics with a new classification of the C line terminations. *Am. J. Phys. Anthrop.,* **33**: 413-420 (1970).

Rife, D.C.: Finger and palmar dermatoglyphics in Seminole Indians of Florida. *Am. J. Phys. Anthrop.,* **28**: 119-126 (1968).