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## PALMAR C-LINE TERMINATIONS AMONG THE TWO TRIBES OF RAJASTHAN

**ABSTRACT.** — Out of the four palmar main lines D.C.B. and A, line-C has been given special emphasis in the population genetic studies, because it shows considerable directional polymorphism (Rife, 1969, Plato, 1970, Bhattacharya, 1971, Bhanu and Malhotra 1972, Ghatage, 1974, Tyagi and Masaldan 1974, Kazi et al. 1975 and Bhanu et al. 1975, Bhanu et al. 1977, Krishan et al. 1979). In the present paper an attempt has been made to find out the bilateral, sexual and population variation exhibited by C-line terminations among the two tribal groups of Rajasthan i.e. the Minas of Jaipur district and Bhils of Udaipur districts. The ethnographic details of these tribes are already reported (Krishan, 1982).

**KEY WORDS:** C-Line terminations — Rajasthan — Minas — Bhils.

### MATERIAL AND METHODS

A total of four hundred bilateral palmar inked impressions were collected on 200 Minas (100 males and 100 females) and 200 Bhils (100 males and 100 females) from various schools and villages of Amer tehsil and Kherwara tehsil of districts, Jaipur and Udaipur of Rajasthan respectively. Palmar main lines were traced as per the methods of Cummins and Midlo (1961). C-line terminations were classified as Radial, Ulnar, proximal and absent as per the recommendation of Plato (1970).

### RESULTS AND DISCUSSIONS

Table—1 displays distribution of C-line terminations among the Minas and the Bhils of Ra-

jasthan. It is evident that the four modal types of C-line terminations show considerable variation for their incidence. Radial termination occurs more frequently on the right hands among both the group 59.0 per cent and 56.0 per cent among the Mina males and Mina females respectively and 63.0 per cent and 55.0 per cent among the Bhil males and Bhil females respectively. Whereas the distribution of ulnar termination shows high incidence on the left hands i.e. 44.0 per cent and 45.0 per cent in Mina males and Mina females respectively and 59.0 per cent and 41.0 per cent in the Bhil males and Bhil females respectively. By examining the distribution of all the four model types of C-line terminations following decreasing progression among both the populations is observed — Radial, Ulnar, absent and proximal types. Chi-square test for the four modal types of C-line terminations show that bila-

TABLE 1. Percentage distribution of C-line terminations among the Minas and the Bhils

Termination types	MINAS						BHILS					
	MALE			FEMALE			MALE			FEMALE		
	R	L	R + L	R	L	R + L	R	L	R + L	R	L	R + L
Ulnar	30.0	44.0	37.0	40.0	45.0	42.5	34.0	59.0	46.5	39.0	41.0	40.0
Radial	59.0	45.0	52.0	56.0	43.0	49.5	63.0	36.0	49.5	55.0	50.0	52.5
Proximal	1.0	2.0	1.5	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Absent	10.0	9.0	9.5	4.0	11.0	7.5	3.0	5.0	4.0	6.0	9.0	7.5
Total:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



TABLE 2. Chi-square values for the bilateral, sexual and group comparison for C-line terminations among the Minas and the Bhils

	X <sup>2</sup> value	d.f.	Probability value	Remarks
<i>Bilateral</i>				
Mina male	7.6759	3	.20 > p > .10	non-significant
Mina female	3.1848	3	.70 > p > .50	non-significant
Bhil male	14.8824	3	p < .001	significant
Bhil female	0.3300	3	.70 > p > .50	non-significant
<i>Sexual</i>				
Mina male & Mina female	2.1084	3	.10 > p > .50	non-significant
Bhil male & Bhil female	3.3032	3	.90 > p > .80	non-significant
<i>Group differences</i>				
Mina male & Bhil male	8.5122	3	.50 > p > .30	significant
Bhil female & Mina female	0.6616	3	.50 > p > .30	non-significant

teral variation for both the sexes of Minas and Bhil females are found to be nonsignificant, whereas the sexual variation for the distribution of C-line terminations are observed to be nonsignificant both for the Minas and the Bhils table-2.

The Chi-square test employed in the male and female series show a definite heterogeneity among the Mina Males and Bhil males for the distribution of four modal types of C-line terminations whereas Mina females and Bhil females show definite homogeneity table-2.

#### CONCLUSION

A study of bilateral palmar inked impressions of 200 Minas (100 males and 100 females) and 200 Bhils (100 males and 100 females) from Jaipur district and Udaipur district of Rajasthan show insignificant bilateral and sexual differences for the for modal types of C-line terminations, whereas population differences for the distribution of four modal types of C-line among Mina males and the Bhil males indicate definite heterogeneity.

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