

Distribution of ABO and Rhesus Blood Groups Among the Sugalis of Kurnool District, Andhra Pradesh

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ABSTRACT The blood group A B O and Rh (D) have been studied in 200 individuals belonging to the Sugali tribal population of Kurnool District, Andhra Pradesh. The allele frequencies for ABO are 0.1584 for A, 0.2361 for B and 0.6054 for O, for Rhesus are 0.726 for D and 0.274 (d).

INTRODUCTION

Blood groups being the simple and most appropriate genetic markers, still continue to rule in studies of human population variation and also it is a valuable tool in blood transfusion, forensic medicine and paternity disputes (Bhasin et al., 1994). The present study was carried out among the Sugalis of Kurnool District of Andhra Pradesh for ABO and Rhesus blood groups.

MATERIAL AND METHODS

For the present study the blood samples were collected randomly from unrelated 200 Sugali individuals from Bugga Thanda and Mitta Thanda, in Patti Konda taluk of Kurnool District of Andhra Pradesh. Serological tests were performed using standard anti-A, anti-B and anti-D sera obtained from Decruz, Bombay. Gene frequencies were calculated using Bernsteins (1931) improved formula.

RESULTS AND DISCUSSION

Blood group phenotype O predominates in distribution with the highest frequency (38.5%), followed by B (32.0%) and A (19.5%). The frequency of allele B is high (0.2361) as compared to A (0.1584) where as frequency of allele O is 0.6054. The frequency of Rh positive phenotype is (92.5%) the allele frequencies being 0.7261 for D and 0.2738 for d (Table 1).

Table 1 : Distribution of ABO and Rhesus phenotypes and allele frequencies among Sugalis of Andhra Pradesh

Blood Group	Phenotype	Per Cent	Frequency Allele
<i>A B O</i>			
O	77	38.5	$A = 0.1584$
A ₁	23	11.5	
A ₂	16	8.0	
B	64	32.0	$B = 0.2361$
A ₁ B	14	7.0	
A ₂ B	6	3.0	
<i>Rhesus</i>			
D	185	92.5	$D = 0.7261$
d	15	7.5	$d = 0.2738$

REFERENCES

- Bhasin, M.K., Walter, H and Danker-Hopfe, H. : *People of India. An Investigation of Biological Variability in Ecological, Ethno-economic and Linguistic Groups*. Kamla-Raj Enterprises, Delhi (1994).