FOR THE RECORD

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HLA-DQA1 and Polymarker Loci Allele Frequencies in the Bharias, a Primitive Indian Tribal Population from Patalkot, India

Population: "Bharias" are one of the classified primitive Indians. They are located in Chhindwara district of Madhya Pradesh, at "Patal Kot" that is situated amidst dense forests surrounded by high hills of "Satpura ranges." "Patal Kot" is a bowl-shaped formation on the Satpura hills surrounded on three sides by hill ridges like a straight wall, thus, making "Patal Kot" almost inaccessible. The total population of "Bharias" comprises of 2012 members belonging to 238 families (1).

KEYWORDS: forensic science, Bharia, population, HLA-DQA1+PM

Twenty-three specimens were collected from unrelated volunteer blood donors. DNA was obtained from blood specimens using "QIAamp Blood and Tissue kit" (QIAGEN GmbH, Hilden, Germany) according to the manufacturer's recommended protocol. Amplification was carried out in a "Gene Amp® PCR system 2400" thermal cycler (Perkin Elmer Corporation, California) using 5 ng target DNA. Typing of the six loci was performed by reverse dot blot with Allele Specific Oligonucleotides (ASO) probes, using "AmpliType® PM+HLADQA1 PCR amplification and typing kit" (Roche Molecular Systems, Inc., New Jersey).

Statistical analysis: Allele frequencies were estimated using standard counting procedures. Each locus was tested for Hardy-Weinberg equilibrium by the chi-square tests (χ^2) throughout.

The complete data set is available upon request via email @rajeshbiswas63@yahoo.co.in

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References

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TABLE 1—*HLA-DQA1 and polymarker loci allele frequencies in the Bharias.*

	HLA-DQA1 N (23) Allele	Allele Frequency
	1.1	0.152
	1.2	0.543
	1.3	0.022
	2	0.109
	3	0.044
	4	0.130
	Expected homozygosity	0.3491
	Observed homozygosity	0.3043
	χ^2	0.0057
	P (for 1 d.f.)	$0.95 > P > 0.90$

PM Loci (N = 23) Allele	Allele Frequency	Expected Homozygosity	Observed Homozygosity	χ^2	P (for 1 d.f.)
LDLR					
A	0.413	0.5151	0.6087	0.0169	$0.90 > P > 0.75$
B	0.587				
GYPA					
A	0.717	0.5941	0.6086	0.0003	$0.99 > P > 0.98$
B	0.283				
HBGG					
A	0.500	0.5000	0.5217	0.0009	$0.95 > P > 0.90$
B	0.500				
C	NA*				
D7S8					
A	0.630	0.5338	0.4782	0.0058	$0.95 > P > 0.90$
B	0.370				
GC					
A	0.261	0.4176	0.5217	0.0259	$0.90 > P > 0.75$
B	0.174				
C	0.565				

* There is no C allele for HBGG.