From Orthodox to Haploid Mitochondrial DNA Markers: Exploring the Datum Folder of population of Sindh in Pakistan

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Abstract : The present study was designed to investigate three regions of mitochondrial DNA, HVI, HVII and HVIII, to hold a powwow genetic diversity and affiliations in 115 probands of 6 major ethnic groups, viz., Bijarani, Chandio, Ghallu, Khoso, Nasrani and Solangi, in the province of Sindh of Pakistan. For this purpose 88 haplotypes were scrutinized, defined by particular set of nucleotides (ignoring the C insertions around position 309 and 315). In spite of that 82% sequences were observed once, 12 % twice and 5.2 % thrice. The most common South Asian haplotypes were observed M (42%), N (6.9%) and R (6.9%) whereas west Eurasian haplotypes were J (1.7%), U (23.4%), H (9.5%), W (6.9%) and T (0.86%), in six ethnic groups. A random match probability between two unrelated individuals was found 0.06 %, while genetic diversity was ranged to be 0.991 to 0.999, and nucleotide diversity ranged from 0.0089 to 0.0142 for the whole control region of the population studied.

Keywords: mtDNA haplogroups, control region, Pakistan, Sindh, ethnicity

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