

Occurrence of Chromosomal Aberrations in Human Populations of Two Endogamous Groups of Haryana

Abhay Singh Yadav^{1*}, Surender Singh², Manoj Kumar Sharma¹ and Preeti Arora¹

1. Human Genetics Laboratory, Department of Zoology, Kurukshetra University,

Kurukshetra 136119, Haryana, India

2. Govt. College, Jind, Haryana, India

E-mail: abyzkuk@gmail.com

KEYWORDS Chromosomal aberration; satellite frequency; mutagens; Meos and Sunni Muslims;
Haryana

ABSTRACT Cytogenetic assays in peripheral blood lymphocytes (PBL) have been done to assess the incidences of chromosomal aberrations among Meos and Sunni Muslims of Haryana. Baseline frequencies of chromosome aberrations (CA) were assessed in 28 subjects from each cast. The mean frequency of chromosomal gaps in Meos was found to be 0.786 ± 0.686 and the frequency of chromosomal break was 0.429 ± 0.504 . Mean frequency of the satellite association in Meos was found to be 1.357 ± 1.821 . Among the Sunni Muslims the mean frequency of chromosomal gaps was found to be 1.250 ± 0.701 and the frequency of chromosomal breaks was 0.643 ± 0.488 . Mean frequency of satellite in Sunni Muslims was found to be 1.250 ± 1.435 . Statistically non-significant differences were observed for the gaps, break and satellite associations, whereas values for total aberrations were found to be statistically significant among Meos and Sunni Muslims. The mean values for chromosomal aberrations and satellite associations were higher in Sunni Muslims (1.893) than in Meos (1.214).