ISSN 0972-3757
International Journal of
HUMAN GENETICS

PRINT: ISSN 0972-3757 ONLINE: 2456-6360
Int J Hum Genet, 11(3): 167-175 (2011)
DOI: 10.31901/24566330.2011/11.03.04

Heterochromatic Variations and Pregnancy Losses in Humans

***Hemlata Purandare, **Nandini Vaz Fernandes, #Sanjay Vasantrao Deshmukh and *Sandesh Chavan**

Centre For Genetic Health Care, Elco Arcade Bandra (W) Mumbai, Maharashtra, India
E-mail: hema.purandarey@gmail.com / sandesh.lc@gmail.com
***** Department of Zoology, Smt. Parvatibai Chowgule College of Arts and Science, Gogol Margao Goa, India***
Email: nvf001@chowgules.ac.in / nandini_chgrl@yahoo.com
#Department of life Sciences, University of Mumbai, Vidyanagari, Santacruz (E), Mumbai 400 098, Maharashtra, India
Email: docsvd@yahoo.com

KEYWORDS Heteromorphic Variations. Miscarriages. Karyotype

ABSTRACT A total of 440 couples (880 individuals) with history of repeated abortions were evaluated for heterochromatic variations. The present study was undertaken with the objective of investigating the role of heteromorphic variations in pregnancy losses and reproductive failures in the human population. Peripheral blood samples of the couples were cultured and processed to obtain metaphase plates. The GTG banded slides were analysed using automated karyotyping system (Cytovision) for precise analysis of the karyotype. The study revealed that the frequency of chromosomal anomalies and variations leading to Bad Obstetric History (BOH) was 17%. Chromosomal rearrangements constituted 24% of the cases while heterochromatic variations constituted 76% of the chromosomal cause for BOH. The heterochromatic variations associated with BOH included inversions and deletions. Our study revealed a correlation between BOH and heterochromatic variations of Chromosome 1 and 9.