

Heterochromatic Variations and Pregnancy Losses in Humans

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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.