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Single Cell Abnormality in Couples with Bad Obstetric History and Repeated Fetal Loss: Occurrence and Clinical Outcome

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ABSTRACT The occurrence of chromosomal aberration in a single metaphase plate is defined as single cell abnormality (SCA). Its causes of origin and significance are not clearly understood. Hence, 389 individuals having clinical history of RFL/BOH were enrolled during April, 2008 - March, 2009 for chromosomal analysis. SCA was observed in 28 patients (7.2 percent). Of these, 17 were females (60.7 percent) giving an overall frequency of 4.4 percent as compared to 2.83 percent in males. Structural rearrangements were observed in 22 cases as compared to numerical anomalies seen in 6 subjects. Reciprocal translocation in 22 patients indicates its definitive role in the event of early pregnancy loss or its contribution in causing deleterious effects leading to fetal loss, fetal growth retardation or multiple birth defects. Genomic instability could attribute to the cause of origin of SCA.