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A Cytogenetic Study of Couples with Miscarriages: An Experience from Manipal Referral Centre

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ABSTRACT Miscarriages are sporadic and are thought to result from genetic causes that are greatly influenced by parental chromosomal abnormalities. The researchers studied two hundred and ten couples to look for the prevalence of chromosomal abnormalities in couples with history of recurrent miscarriages. Karyotyping analysis was done by peripheral blood culture and GTG banding. Chromosomal aberrations were found in 8.57% patients: Numerical abnormalities - 0.95%, Structural abnormalities – 2.87% and polymorphic variants -4.76%. However, seven new balanced translocations detected in these patients have not been reported elsewhere in the literature. Couples whose carrier status was ascertained after two or more miscarriages have a low risk of viable offspring with unbalanced chromosomal abnormalities. Therefore, genetic counseling including karyotype is a prerequisite to identify risk factors in couples with recurrent miscarriages.