

**P015** Chromosomal instability associated with chromosomal translocation in women with recurrent abortions

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**Objective(s):** To identify chromosomal translocation associated with recurrent abortion and measure DNA chromosomal instability in cells from these patients.

**Methods:** Chromosomal karyotyping analysis was performed on peripheral blood lymphocytes by using GTG-banding method. The chromosomal instability of patients and matched controls was tested by measuring the hypersensitivity to the clastogenic effect of the DNA cross-linking agent 1-3-Butadiene diepoxide.

**Results:** The data report a novel chromosomal translocation t(2;10)(p21;p15) in two young women who presented a reproductive history of early recurrent spontaneous abortions (7-10 weeks). In addition to the abnormal karyotypes in these two patients, cultured patient lymphocytes showed increased chromosomal fragility/instability as compared with normal controls. This chromosomal instability was further enhanced by the DNA clastogenic agent, diepoxybutane (DEB).

**Conclusions:** Although the relationship between this chromosomal translocation and the DNA fragility in these patients is not well understood, our report shows for the first time a link between the presence of this novel chromosomal translocation and a complete early embryonic lethality. Additional studies should be undertaken to identify the affected gene (s) by this translocation and may shed some light about the relationship between this chromosomal translocation and chromosomal instability.