

**P-23**      **A Healthy Live Birth after Successful Preimplantation Genetic Diagnosis for Carriers of Complex Chromosome Rearrangements**

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**Objectives:** A healthy live birth after successful preimplantation genetic diagnosis for carriers of complex chromosome rearrangements.

**Methods:** Fluorescent in-situ hybridization (FISH) was applied to PGD for CCRs. (Patient A: 46,XX,t(6;10;8)(q25.1;q21.1;q21.1) and patient B: 46,X,del(X)(p22.3),t(2;18)(q14.1;q21)[48]/45,X,t(2;18)(q14.1;q21)[12]). Balanced or normal embryos were selected and transferred after PGD. Diagnosis rate of FISH, pregnancy outcome and karyotype of amniocentesis were evaluated.

**Results:** Blastomeres were biopsied from 49 embryos in three PGD cycles and 47 embryos (91.2%) were successfully diagnosed by FISH. Among them, three embryos were diagnosed as transferable in two cycles of patient B. One embryo was transferred in the first cycle and two embryos were transferred in the second cycle. Successful pregnancy was achieved in the second PGD cycle of patient B and the karyotype of amniocentesis was 46,XY,t(2;18)(q14.1;q21). A healthy baby was delivered at 40 weeks of gestation by Caesarean section.

**Conclusion:** This is the first report for a live birth after PGD in the CCR carriers associated with translocation and deletion, 46,X,del(X)(p22.3),t(2;18)(q14.1;q21)[48]/45,X,t(2;18)(q14.1;q21)[12]. PGD for CCRs needs more considerations and advanced techniques for full karyotyping.