

Evaluation of M2/ANXA5 Haplotype and P53 Codon 72 Polymorphism in a Patient with Recurrent Pregnancy Loss, Ectopic Pregnancy and Recurrent Implantation Failure

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ABSTRACT Repeated implantation failure and recurrent pregnancy loss are foremost problems faced by couples undergoing assisted reproductive techniques (ART). Impairment of placental vascularisation often caused by thrombophilias has been the major cause for such consequences. Annexin A5 is a placental anticoagulant protein, which promotes good blood supply to the fetus throughout gestation. M2 haplotype of ANXA5 leads to reduced gene expression which may lead to hypercoagulability in inter villous space ultimately resulting in early pregnancy loss. In addition to this another gene p53 plays a vital role in inducing apoptosis as well as angiogenesis, it also regulates female reproduction besides blastocyst implantation through leukemia inhibiting factor. Here the researchers report a 25-year-old female with recurrent implantation failure and recurrent pregnancy loss subjected to genetic testing which revealed the prevalence of M2/ANXA5 haplotype and there is no p53 codon 72 polymorphism. The case here highlights the key role of Annexin and p53 gene in reproductive outcome.