

Carriage of 675 4G/5G Polymorphism in PAI-1 Gene and Its Association with Early Pregnancy Losses in Patients with Polycystic Ovary Syndrome

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Abstract : Leptin and PAI-1 are important cytokines and may play a role in the regulation of PCOS development. PCOS is frequently associated with obesity, high BMI index and consequently with increased risk of metabolic disorders. The aim of the present study was to evaluate PAI-1 levels, genetic influence of the carriage of 675 4G/5G polymorphism in PAI-1 gene and leptin as a marker of obesity in the development of PCOS. Methods: Genotyping in 84 patients with PCOS and PCO and 100 healthy control subjects to detect single nucleotide deletion 675 G in the promoter of PAI-1 gene. The present study provides evidence that SNP 4G in the PAI-1 gene is associated with early pregnancy losses in patients with polycystosis. Further to this, there is a correlation between leptin levels, PAI-1 levels and BMI in the patients with PCOS, which confirms the role of obesity as a risk factor for PCOS.

Keywords : carriage of 675 4G/5G polymorphism, PCOS, early pregnancy losses, PAI-1 gene

Conference Title : ICOG 2014 : International Conference on Obstetrics and Gynaecology

Conference Location : London, United Kingdom

Conference Dates : September 26-27, 2014