O-24 G769A Variation of Inhibin Gene is Rare in Korean Women with Premature Ovarian Failure

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Objectives: Premature ovarian failure (POF) is menopause before the age of 40 years. The frequency of POF is about 1% of all women. Inhibin, the glycoprotein, is gonadal hormone which can inhibit the synthesis and secretion of pituitary FSH which has an important role in the recruitment and development of ovarian follicles during folliculogenesis. The variation of G769A has reported its association to POF, which result in alanine to threonine amino acid substitution of INH. This study were screened a G769A variation whether it is associated with POF.

Materials and Methods: From June 2000 to January 2002, 84 women with POF and 100 healthy fertile women consented to the use of their blood. Genomic DNA was extracted from 5 ml samples of blood. DNA was stored in 200 μ l Tris-EDTA buffer at -20 Γ . PCR primers were designed to amplify INH α . The PCR product was separated on 2% agarose gel and visualized under UV light. RFLP was used to identify the presence of the INH G769A variant.

Results: RFLP analysis of the 243 bp INH amplification product from DNA samples of 84 POF patients and 100 normal fertile individuals showed no variation. All the samples had three fragments length of 133 bp, 85 bp, and 25 bp.

Conclusions: Total of 84 women with POF and 100 healthy fertile women were screened a G769A transition in the INH α gene. We found no variation from healthy and POF person. Therefore the INH α gene mutations may be rare in Korean patients with POF.