

P-51 Molecular Analysis of the FSH Receptor and LH Gene
in Korean Premature Ovarian Failure (POF) Women

**N.K. Kim^{1,2}, S.H. Lee^{1,2}, J.K. Kim¹, T.J. Shon¹, S.H. Park¹, Y.S. Nam³,
S.Y. Han^{1,2}, H.S. Jeon^{1,2}, W.S. Park^{1,2}, D.H. Choi^{1,2}, J.J. Ko^{1,2}
and K.Y. Cha^{1,2}**

¹Institute of Medical Research, College of Medicine, Pochon CHA University, Pochon,
487-700, ²Human Genetics Lab. Infertility Medical Center, CHA General Hospital,
Seoul 135-081 ³Obstetrics & Gynecology and Infertility Medical Center,
Pundang CHA General Hospital, Sungnam 463-070

This study was performed to determine whether the FSH receptor and LH gene missense mutation is present in Korean women with POF. Forty-five women with idiopathic POF, five women with known causes and fifty normal controls were investigated. The polymorphisms of FSH receptor exon 10 (Thr307Ala; A919G) and LH exon 2 (Trp8Arg; TGG to CGG and Ile15Thr; ATC to ACC) were studied in 45 Korean POF (infertile) patients and 54 normal (control) women.

Missense mutation in Exon 10 was detected in POF women by PCR-SSCP. The most frequent phenotype was FSHR10 AG type (42.9%) followed by FSHR10 GG type (35.7%) and FSHR10 AA type (21.4%). The allele frequencies of *FSHR10G* and *FSHR10A* were 0.57 and 0.43, respectively.

The two loci of LH exon 2 (LH2) were studied in POF patients and normal women. The phenotypic frequencies of LH2 (Trp8Arg) in POF patients were LH2 1-1 type (89.9%) and LH2 2-1 type (11.1%). The allele frequencies of *LH21* and *LH22* were 0.956 and 0.044, respectively. The allelic frequencies of *LH21* and *LH22* in normal women were 0.963 and 0.037, respectively. The phenotypic frequencies of LH2 (Ile15Thr) in POF patients were LH2 TT type (86.7%) and LH2 TC type (13.3%). The allele frequencies of *LH2T* and *LH2C* in POF patients were 0.933 and 0.067, respectively. The allelic frequencies of *LH2T* and *LH2C* in normal women were 0.963 and 0.037, respectively. The LH2 variant was more frequent in the patients (20.0%) than in the controls (16.7%). The prevalence of POF did not differ between patients with variant LH and normal LH. POF patients with the variant was slightly higher than normal women with the variant.

P-52 시험관아기과정에서 보조부화술의 방법이 임신율에
미치는 영향

차병원 여성의학연구소¹, 포천중문의과대학교²

**엄기봉^{1,2} · 손지은¹ · 김현규¹ · 정형민^{1,2} · 이숙환^{1,2} · 박인평^{1,2}
최동희^{1,2} · 윤태기^{1,2} · 차광열^{1,2}**

시험관아기프로그램에서 임신율을 높이기 위한 한 방편으로서 보조부화술 (Assisted Hatching)이 실시되어 왔으며, 일반적으로 긍정적인 효과가 인정되고 있다. 현재 보조부화술은 투명대 부분절개법 (Partial zona dissection; PZD)에 의한 투명대의 부분적인 절개와 산