

**P-25 Spindle and Chromosome Configurations of in vitro
Maturation Failure Metaphase I Arrested
Oocytes Collected from PCO Patients**

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Objectives: The in vitro maturation of immature oocytes retrieved from unstimulated ovaries has been interested in assisted reproductive technology. Oocyte maturation, characterized by germinal vesicle (GV) break-down, formation of first meiotic spindle, extrusion of the first polar body, and arrest in metaphase of the second meiotic division. However, numerous anomalies in the nuclear and cytoplasmic maturation were induced during in vitro maturation. This study was conducted to analyze spindle and chromosome configurations of in vitro maturation failure metaphase I (MI) arrested oocytes collected from PCO patients.

Materials and Methods: Immature oocytes were aspirated using ultrasound guided aspiration method with specially designed injection needle from unstimulated PCO patients. Oocytes with a germinal vesicle were cultured in maturation medium for 48 h. Oocytes were removed cumulus cells with hyaluronidase and mechanical pipetting after culture. Oocytes without an intact GV and 1st polar body were defined as metaphase I. Oocytes were used for immunostaining by using monoclonal anti-tubulin antibody and TRITC-conjugated second antibody

Results: Absent (85%) or disorganized (15%) spindle and dispersed chromosomes (100%) were observed in all analyzed oocytes

Conclusions: This result suggested that the MI arrested oocytes was related to the MI spindle, with absence of microtubules and dispersion of the chromosomes

**P-26 Molecular Markers during the Onset of Implantation
in the Mouse Luminal Epithelium**

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Objectives: Implantation is defined as a process by which the blastocysts make the first physiological contact with the maternal uterine luminal epithelium. Blastocysts and uterus generate various factors during implantation, but it is likely that the molecular "cross-talk" between them involves many more yet unknown factors. Identification of essential regulatory factors is necessary to understand the basis for the establishment of pregnancy or the underlying causes of pregnancy failures. To address this issue, we isolated luminal