

0-7 Comparison of Oct-4 Expression between Large and Small Follicle during Oocyte Maturation

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Objectives: Previous reports have indicated that oocytes obtained from large follicles have higher developmental competence and ability in developmental rate than oocytes from small follicles. Oct-4 has revealed the major factor of pluripotency in germ cell, embryonic carcinoma cell and embryonic stem cell. In this study, we examined how the transcription factor Oct-4 related to follicle maturation during mouse oocyte maturation.

Materials and Methods: Immature mouse oocytes were obtained from 3~4 weeks old F₁ hybrid (C57BL♀XCBA♂) mice that were injected with 5 IU PMSG. Morphologically healthy oocytes with distinct germinal vesicle (GV) were liberated from the large follicles and small follicles. One group of oocytes was cultured in M16 media and the other group was examined the expression of Oct-4 using RT-PCR and the level of expression was analysed by Image analyzer (Vilber Lourmat).

Results: Oocytes at GV stage that have obtained from small follicles relatively showed lower maturation rate than obtained from large follicles (22.2 vs 74.2%). For knowing the relationship between Oct-4 expression and oocyte maturation according to follicle maturation, we examined the level of Oct-4 using RT-PCR at GV, Germinal Vesicle Break Down (GVBD) and Metaphase II (MII, 1st polar body extrusion) stage in large and small follicles. They showed different pattern of Oct-4 expression according to follicle maturation. In oocytes obtained from large follicles, the Oct-4 expression level arose according to oocyte maturation stage. However, level of Oct-4 expression relatively did not showed much differences according to oocyte maturation from small follicles.

Conclusions: These results may suggest that the increase of Oct-4 expression level at each stage contributed to oocyte maturation and certain level of Oct-4 expression may require in oocyte maturation.

0-8 불임환자에서 미세술기를 이용한 저위서혜부 정계정맥류제거술의 임상효과: 예후인자분석

서울대학교 의과대학 비뇨기과

박관진 · 박형근 · 정인갑 · 임대정 · 정병창 · 손환철
김수웅 · 최 황 · 백재승

목 적: 정계정맥류는 정액의 지표를 악화시키며 불임을 유도하는 것으로 알려져 있으나 정확한 병태