

Embryo development of follicular and luteal phase stimulation in the same menstrual cycle

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ABSTRACT

Introduction: Double stimulation (duo-stim) strategy involves ovarian stimulation in the follicular and luteal phase from a single menstrual cycle. Compared to conventional protocol, duo-stim allows recovery of an increased number of oocytes and opportunity to produce more transferable embryos without needing to delay the start of a new stimulation cycle. We aim to assess the embryo quality derived from follicular phase stimulation (FPS) and luteal phase stimulation (LPS) using duo-stim protocol. **Methods:** Twenty-four patients (mean age: 37.6; age range: 28.0–46.0) underwent duo-stim protocol between January 2019 to December 2021. FPS was achieved with the administration of GnRH-antagonist, including recombinant-FSH and menotropin if required. LPS was executed similarly following the first retrieval (day range: 5-11). Oocytes were inseminated and cultured up to 7 days. Embryos were evaluated based on Gardner's Grading. **Results:** LPS showed higher number of oocytes retrieved than FPS (92 vs 73). The maturation, fertilization, blastulation and utilization of FPS and LPS were 83.6% vs. 72.8%; 70.5% vs. 77.6%; 83.7% vs. 82.7% and 65.1% vs. 57.7% respectively. These results showed no significant differences ($p>0.05$). FPS and LPS produced 48.8% vs. 38.5% of Group I, 7.0% vs. 3.9% of Group II and 9.3% vs. 15.3% of Group III respectively. No statistical significances were found between the grading of FPS and LPS derived blastocysts ($p>0.05$). **Conclusions:** Duo-stim strategy can be recommended to accumulate more transferable embryos within a shorter period of time as LPS is not inferior to FPS in terms of embryo development.

Routine bladder catheterization prior oocyte retrieval: Is it a must?

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ABSTRACT

Background: Bladder catheterization was routinely performed before the gynaecological procedures, but such an established practice is not evidence based and may lead to an increase in postoperative urinary symptoms and urinary tract infection. We aim to observe routine urethral catheterization before oocyte retrieval with respect to residual urine volume which may affect oocyte collection technically. **Methods:** This was a prospective observational study. All women undergoing oocyte retrieval were observed in the study. Cases are patients who undergone oocyte retrieval from October 2020 until July 2021. All patients were asked to void her urine before the procedure and routine bladder catheterization was performed prior the oocyte retrieval. Timing of voiding urine, timing and urine volume of bladder catheterization was documented. **Results:** 101 women were involved in this study. The interval between voiding urine and bladder catheterization were between 5~60 mins with catheterized urine volume between 5-80 cc recorded. **Conclusions:** There is no need for routine bladder catheterization prior oocyte retrieval, provided routine voiding of urine is carried out prior to the procedure.