In vitro maturation (IVM) for patients with polycystic ovary syndrome (PCOS): A retrospective case series in the United States

Introduction: In other parts of the world, many centers employ IVM as a routine treatment option for patients with PCOS. However, in the USA, IVM is still considered to be experimental (ASRM 2013 committee opinion).

Materials & Methods: Patients with PCOS (Rotterdam criteria) who failed ovulation induction with intrauterine insemination and or IVF were offered IVM as a treatment option. 12 of these patients underwent an IVM cycle. Cycles were primed with 3 days of gonadotropins (FSH 150 units) from cycle day 3 to 5. hCG 10,000 units was administered when the lead follicle was 10-12 mm. Oocyte retrieval took place 36 to 40 hours later. The oocytes retrieved were cultured with IVM media. Oocytes that matured in vitro were fertilized with ICSI. Embryo transfers were performed during fresh cycles when endometrial lining was 7-8 mm. Outcomes analyzed were implantation, clinical-pregnancy and live birthrates.

Results: 12 PCOS patients 25 to 34 years of age were included. The number of germinal vesicles retrieved was 13.3±1.2 (mean±SD). The per cycle implantation rate was 83% (10/12). The clinical pregnancy rate and the live birthrate was 75% (9/12, no clinical pregnancy losses). There were no cases of ovarian hyper stimulation syndrome or any surgical complications.

Conclusions: This case series demonstrates that young PCOS patients who underwent IVM have excellent live birthrates while eliminating the incidence of ovarian hyper-stimulation. IVM is a suitable treatment alternative for patients with PCOS and should be given further consideration in the USA.

Biography
Janelle Luk has graduated from Yale University School of Medicine and completed her Residency at Harvard, and later returned to Yale, where she has completed a fellowship at the Division of Reproductive Endocrinology and infertility. As a Medical Director of Neway Fertility, she specializes in creating individualized fertility treatments for her patients. She draws on her vast expertise in both traditional and alternative IVF treatments to cater to the unique needs of each individual woman. Her areas of expertise include premature ovarian failure, diminished ovarian reserve and polycystic ovarian syndrome.

jluk@newayfertility.com