

## ***In Vitro* maturation and fertilization of human oocytes from unstimulated Polycystic Ovaries.**

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### **Abstract**

Having baby is a desire which plays a major role in everybody's life. Infertility as unsuccess in achieving this is an annoying matter, affecting approximately 20% of couples. However, this fact should not be ignored that there is still many unknown problems related to infertility. Polycystic ovarian syndrom (PCOS) is one of these Problems. In our study, recovery of immature oocytes followed by in vitro maturation (IVM) of these oocytes was developed as a new method for the first time in Iran for treatment of patients with infertility due to PCOS. The purpose of this study was to reduce the side effects of the currently used treatments such as ovarian hyperstimulation syndrome, ascites, circulation dysfunction, renal dysfunction, thrombosis, multiple pregnancy ,..., as well as their expensive cost. Immature oocytes were collected by transvaginal ultrasound and then transferred to maturation medium for culture. After 24 and 48h of incubation, mature oocytes were transferred to endometrium. Spermatozoa for ICSI were prepared by Swim up, and injected to the mature oocyte with micromanipulator system. A total of 52 immature oocytes were retrieved, all of which matured after incubation(100%); 49 mature oocytes were injected and 35 were cleaved (71%). Satisfactory results of IVM have been published, thus due to its advantages and suprising reduction of the medical cost, it could be as a miracle in curing infertility.

**Keyword:** Maturation, Oocyte, In Vitro maturation, and Without induction of ovulation.

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