## 9<sup>th</sup> Yazd International Congress and Student Award on Reproductive Medicine with 4<sup>th</sup> Congress of Reproductive Genetics

## **Poster Presentations**

## P-138

SPOM as a ART method for treating infertility: A review study

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**Background:** Assisted reproductive technology (ART) described as the medical procedures used for treating infertility. Infertility, especially in patients with polycystic ovarian disease, is a critical problem as they cannot develop the mature oocyte. One of the methods of ART is stimulated physiological oocyte maturation (abbreviated as SPOM); in this method, instead of removing the mature oocyte for using in IVF, the premature oocyte removed from the ovary and placed in the appropriate medium for maturation which called IVM (in vitro maturation). After in vitro maturation, these oocytes can be used for IVF like

mature oocytes.

**Objective:** In this study, we aim to review the studies about SPOM and discuss the challenges and the different methods used in SPOM and assess the SPOM as a new method for using in human studies.

Materials and Methods: Three databases include Web of Science, Scopus, and PubMed searched by two key words: ART and SPOM. The time range was set from 1992 to 2021, and the irrelevant or duplicated articles removed. The studies assessed include both peer-review and primary studies.

**Results:** About 50 articles assessed and read, and the parameters which were important in SPOM extracted. Based on the articles' information, the parameters like the challenges which the SPOM faced to it for application in human studies, the advantages and disadvantages of each method extracted.

**Conclusion:** In this study, we concluded that the SPOM could be a useful approach for treating infertility, especially among PCO patients.

Key words: SPOM, IVM, ART, PCO.