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الجمعية الإسرائيلية لأبحاث الخصوبة

A comparison between two subsequent oocyte cryopreservation cycles in patients with diminished ovarian reserve

Or BEN CHAIM[1], MD; Avital WERTHEIMER[1,2], MD ; Onit SAPIR[1,2], MD; Alyssa HOCHBERG[1,2], MD; Eran ALTMAN[1,2], MD; Tzipora SHOCHAT[3], M.Sc; Prof. Avi BEN-HAROUSH[1,2], MD; Prof. Yoel SHUFARO[1,2], MD;

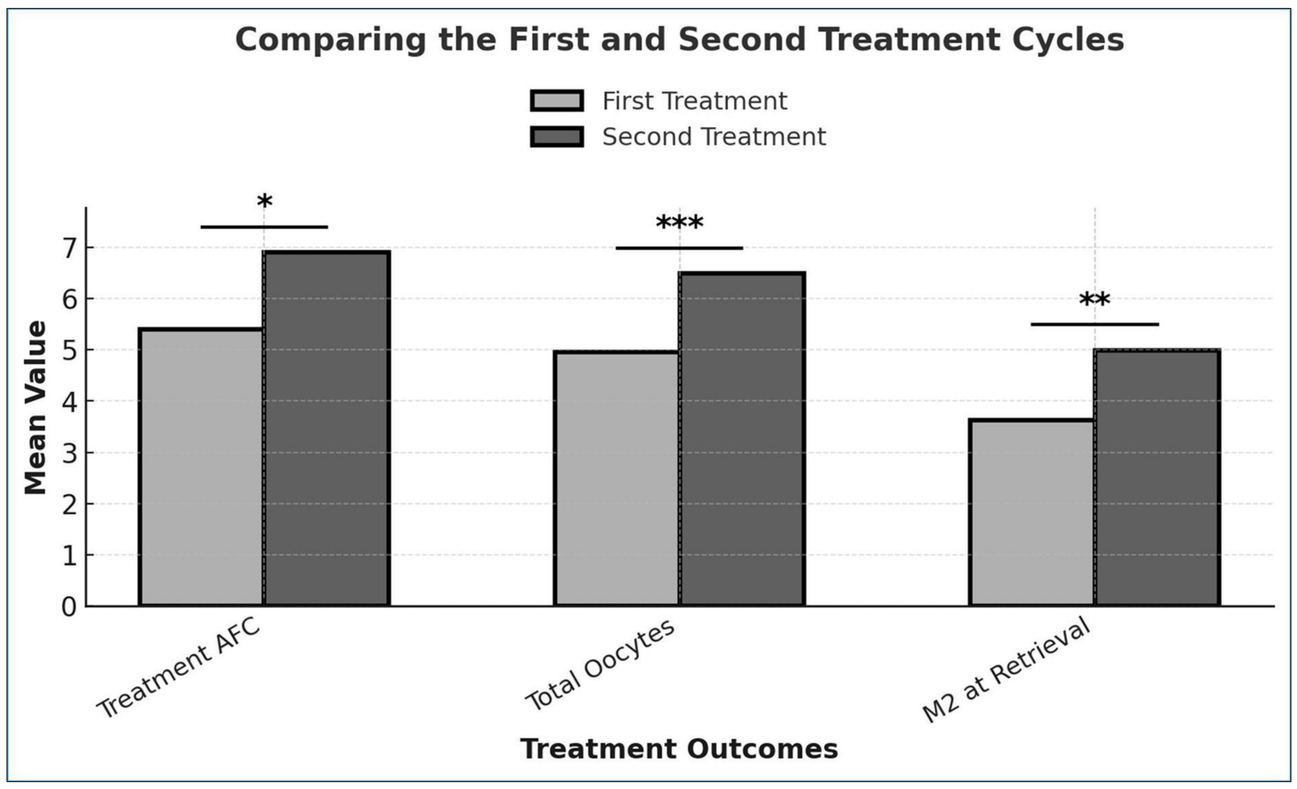
[1] Helen Schneider Hospital for Women, Rabin Medical Center, Petach Tikva, Israel
[2] Faculty of Medical Health Sciences, Tel Aviv University, Tel Aviv, Israel
[3] Statistical Consulting Services, Rabin Medical Center, Petach Tikva, Israel

INTRODUCTION

- **Research Problem**: Women with diminished ovarian reserve (DOR) face challenges in retrieving mature oocytes for fertility preservation. In Israel, women under the age of 39 who meet at least two of the three DOR criteria are entitled to receive up to four cryopreservation cycles or a total of 20 cryopreserved oocytes. Research on outcome differences between consecutive cycles remains limited.
- **Objective**: This study compares the first and second oocyte cryopreservation cycles in women with DOR and assesses the impact of treatment parameters on cycle outcomes.
- **Methods**: A total of 79 DOR patients under 39 underwent two consecutive oocyte cryopreservation cycles at the IVF unit of Beilinson Hospital between June 2019 and January 2023.

RESULTS

- **The second cycle demonstrated significant increases** in **AFC** (5.4±3.5 vs. 6.9±4.5, p=0.0143), **total oocytes retrieved** (5±3.7 vs. 6.5±5.2, p=0.0007), and **cryopreserved oocytes** (3.3±3.15 vs. 4.3±4.3, p=0.0069).
- Multivariate logistic regression controlling for drug type, dosages, and treatment protocols confirmed that a second treatment cycle was significantly associated with a higher number of oocytes retrieved and cryopreserved.



CONCLUSION

- These findings suggest that **a second cryopreservation cycle can modestly enhance oocyte yield** for **women with diminished ovarian reserve.**
- Since each egg is crucial for this population, clinicians should consider repeated ovarian stimulation strategies to optimize IVF outcomes.

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CONTACT

Or Ben Chaim, MD | **Email**: bcor99@gmail.com

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