

INTRODUCTION

The quality of the cryopreserved egg is inversely proportional to the age of a woman and thus, it is advisable for oocyte cryopreservation to be performed at younger age. The reason being is to ensure the quality of the cryopreserved oocytes which have direct impact on the in vitro-fertilization (IVF) treatment outcome later. With the increasing awareness among new age young women, oocyte cryopreservation is perceived to be mostly performed for women with the intention of social freezing (1,2). However, the data collected in our centre is contradicting with the perception.

AIM

To review the reasons of oocyte cryopreservation and subsequent effects towards clinical pregnancy rate (CPR) per return patient and per embryo transfer (ET) done.

METHODS

A retrospective review of total 118 cases of oocyte cryopreservation in our centre from 2015-2020 were conducted. Two main reasons of oocyte cryopreservation were identified. The percentage of patient from each group who later returned for oocytes to be thawed and underwent ICSI were being recorded. CPR per patient and CPR per ET were being analyzed.

RESULTS

Out of the 118 cases, 51 cases were social freezing and the remaining 67 cases, oocytes were frozen because sperm sample was unavailable on the day of oocyte pick up (OPU) due to difficulties encountered during semen sample collection (Table 1).

From social freezing group, two patients (3.9%) returned for ICSI procedure within these 5 years but no pregnancy was achieved. In contrast, for patients whereby the oocytes were frozen due to sperm sample not available on OPU day, 62.7% (n=67) of patients returned for oocyte to be warmed and utilized. The CPR per patient and CPR per ET is 21.4% (n=42) and 36.0% (n=25) (Table 2).

Table 1: Total Number of cases from Year 2015-2020

REASONS/ YEAR	NO OF CASES						
	2015	2016	2017	2018	2019	2020	TOTAL
SOCIAL FREEZING	2	8	5	21	7	8	51
SPERM SAMPLE UNAVAILABLE ON THE DAY OF OOCYTE PICK UP (OPU)	11	13	15	8	5	15	67
TOTAL	13	21	20	29	12	23	118

Table 2: Pregnancy Rate/ Patient and Pregnancy Rate/Embryo Transfer

REASONS OF OOCYTE CRYOPRESERVATION	TURN UP FOR TREATMENT	NO SHOW	PREGNANCY RATE/PATIENT	PREGNANCY RATE/ET
SOCIAL FREEZING (n=51)	2	49	0%	0%
SPERM UNAVAILABLE ON THE DAY OF OOCYTE PICK UP (OPU) (n=67)	42	25	21.4%	36.0%

CONCLUSION

The CPR per patient and CPR per ET by warming oocyte for ICSI procedure is 21.4% and 36.0%. As oocyte cryopreservation are mainly performed due to unplanned medical reason in our centre, the treatment outcomes, although reasonable, are slightly compromised compared to those treated using fresh oocytes. The result is biased as most of these oocyte freezing procedures were performed as emergency and not at optimum timing. As for social egg freezing, the actual treatment prospect will take a much longer time to establish.

REFERENCES

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