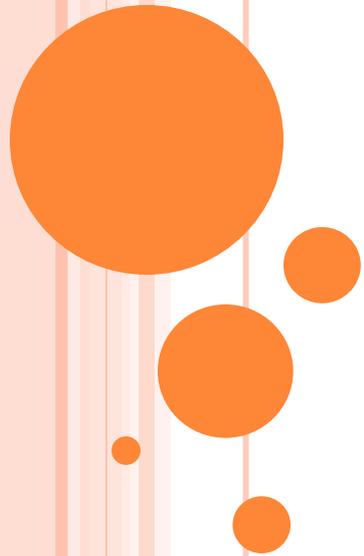


**INITIAL RESULTS OF THE SECOND - TIME  
OOCYTE RETRIEVAL IN THE SAME OVARIAN  
STIMULATION CIRCLE AT ASSISTED  
REPRODUCTIVE TECHNOLOGY CENTER OF  
HAI PHONG WOMEN HOSPITAL**



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# BACKGROUND

- In assisted reproductive technology, the ovarian stimulation protocols are used for producing more competent oocytes and healthier embryos and increasing fertilization rate



## BACKGROUND

- Recent evidence indicates that folliculogenesis occurs in a wave-like fashion. Thus, in the same menstrual cycle, there are multiple follicular recruitment waves
- This fact challenges the traditional theory that a single cohort of antral follicles only develop during the follicular phase of the menstrual cycle.



# BACKGROUND

- It's the basis for the second oocyte retrieval in the same ovarian stimulation cycle



# PATIENTS & METHODS

## 1. Patients

- 60 cases undergone second time oocyte retrieval in the same ovarian stimulation circle at assisted reproductive technology center of Hai Phong women hospital from 6/2016 to 2/2017.
- Patients received gnrh antagonist protocol for ovarian stimulation. The second – oocyte retrieval was performed after the first one 24 – 48h: Monitor follicular development on ultrasound, if there are follicles of size  $\geq 14\text{mm}$  to perform the second – time oocyte retrieval.

# OBJECTIVE

- To evaluate the initial results of second –time oocyte retrieval in the same ovarian stimulation circle.



# PATIENTS & METHODS

## 2. Methods:

- Descriptive retrospective study
- Endpoints: Fertilization rate, mature (metaphase II) oocytes rate



# RESULTS

## 1. Patients' characteristics

### ○ Age

Age (years)	n	%
< 30	24	40
30 – 35	24	40
> 35	12	20
Sum	60	100
Mean ( SD)	31,6	5,3



# RESULTS

- Type of infertility

Type of infertility	n	%
Primary	32	53,3
Secondary	28	46,7
Sum	60	100



# RESULTS

## ○ Duration of infertility

Duration of infertility (years)	n	%
≤ 5	47	78,3
> 5	13	21,7
Sum	60	100
Mean ( SD)	3,63	2,5



# RESULTS

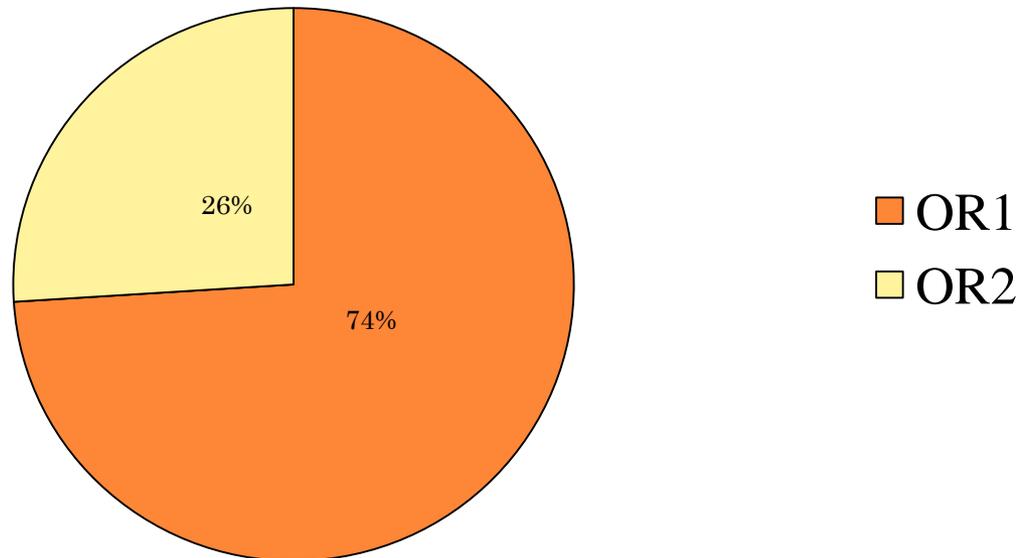
## ○ Indication for IVF

Indication	n	%
Male factor	13	21,7
Tubor factor	15	25
Ovulation disorder	8	13,3
Both male and female factor	8	13,3
Endometriosis	1	1,7
Others	15	25
sum	60	100

# RESULTS

## 2. Result of oocytes retrieved

**Figure 1: number of oocytes after two times oocyte retrieval**



# RESULTS

- Mature (metaphase II) oocytes rate

	Number of oocytes retrieved	Number of MII	%	p
OR 1	589	443	75,21	> 0,05
OR 2	203	140	68,96	



# RESULTS

## 3. Fertilization rate

	OR 1		OR 2		P
Mean fertilization rate	73,3	25,13	66	32,13	> 0,05
Mean of embryos	2,31	1,7	7,07	4,83	< 0,05



# CONCLUSION

- **The second time oocyte retrieval could provide an opportunity to retrieve more oocytes with good quality.**



# CONCLUSION

- The questions:
  - Should we use the double stimulation protocol for the second time oocyte retrieval?
  - who will benefit from the second – time oocyte retrieval??



## CONCLUSION

- We need more large cohort studies/randomized clinical trials with live-birth rates as outcomes are needed to better elucidate the benefit of the result of the second time oocyte retrieval.





**Thank you for your attention!**