

ISFP2015 (中国)

Fertility preservation and treatment in breast cancer patients: a retrospective single center study

T. Hashimoto¹, Y. Sato¹, E. Sakamoto¹, M. Kuchiki¹, A. Tanaka², S. Nonaka², M. Ono², T. Okuda², T. Takeuchi², M. Doshida¹, M. Toya¹, K. Kyono^{1,2}

¹Kyono ART Clinic

²Kyono ART Clinic Takanawa

Objectives

To assess the efficacy of fertility preservation (FP) before chemotherapy among breast cancer patients.

Materials and Methods

Subjects were 62 breast cancer patients who visited our center from October 2003 to June 2015. These were divided into subgroups (those who underwent FP (group A) or fertility treatment (group B)). Number of retrieved oocytes, vitrified oocytes/embryos, and pregnancy rates were analyzed. Group B was divided into group C (pre-/without chemotherapy) and group D (post-chemotherapy) to analyze the effect of anticancer drugs on ovarian reserve and ART results.

Results

Group A patients underwent egg collection pre-/without chemotherapy. Ages were significantly lower in group A than in group B (35.41 ± 3.23 vs 39.13 ± 3.98 years old, $p=0.0007$), although the titer of anti-Müllerian hormone (AMH) was similar between the two groups. The number of collected oocytes and vitrified oocytes/embryos was significantly larger in group A than in group B (6.86 ± 5.62 vs 3.54 ± 3.73 , $p=0.006$) (3.50 ± 3.43 vs 0.91 ± 1.92 , $p=0.0003$). Group C had significantly higher AMH than group D (3.75 ± 3.12 ng/ml vs 0.96 ± 1.08 ng/ml, $p=0.004$); more oocytes (5.28 ± 4.66 vs 2.42 ± 2.54 , $p=0.006$) and vitrified oocytes/embryos (1.84 ± 2.58 vs 0.25 ± 0.51 , $p=0.005$). 24.5% (13/53) of patients achieved pregnancy, including 2 out of 2 group A patients who underwent vitrified-warmed embryo transfer. 70% of pregnant patients were pre-/without chemotherapy.

Conclusion

FP of oocytes/embryos pre-chemotherapy may be promising for breast cancer patients with no risk of minimal residual disease.