FERTILITY PRESERVATION BY CONTROLLED OVARIAN HYPERSTIMULATION (COH) WITHOUT LETROZOLE IN YOUNG BREAST CANCER PATIENTS BEFORE ADJUVANT CHEMOTHERAPY: PRELIMINARY RESULTS

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Objective: Few studies have addressed the issue of COH for fertility preservation in breast cancer patients. Letrozole is currently required in order to limit the estrogen levels increase. In France, the use of letrozole in this specific area is not allowed. The aim of this study is to evaluate the benefit/risk of the ovarian stimulation without letrozole for oocyte freezing in young breast cancer patients undergoing adjuvant chemotherapy.

Design: Prospective observational study.

Materials and Methods: A total of 47 young breast cancer patients were prospectively included before adjuvant chemotherapy. The inclusion criteria for being eligible to COH were: age under 40, complete surgery, absence of metastases. Lymph node status, presence of hormonal receptors, BRCA 1/2 were not exclusion criteria. COH protocol consisted in the association of r-FSH and antagonist with a GnRh agonist triggering. r-FSH starting dose varied from 150 to 450 IU. Patients were then enrolled in a systematic oncologic and reproductive follow-up for 3 consecutive years.

Results: 13 patients declined the proposal of fertility preservation and 4 were not eligible because of suspect uptakes during positron emission tomography. 30 patients underwent COH. Mean age was 30.3 +/- 3.4. Mean r-FSH dose was 271 +/- 92 IU. Peak E2 levels on triggering day ranged from 149 to 5314 pg/ml with a mean of 1793 +/- 1173 pg/ml. An average of 10 oocytes +/- 5.6 was retrieved. The mean number of vitrified oocytes was 7 +/- 4.9. Time between surgery and chemotherapy was 46.6 days (18-69). Mean duration of follow-up after the end of chemotherapy was 10 months +/- 11. No oncologic recurrences were observed during the study period. There were 2 cases of OHSS and 3 cycle cancellations for insufficient response.

Conclusions: These preliminary results have to be confirmed in a larger population through a much long-term follow-up.