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TITLE

PATIENTS WITH LYMPHOMA SHOW REDUCED OVARIAN RESERVE AND WORSE OUTCOME OF OVARIAN CONTROLLED STIMULATION FOR FERTILITY PRESERVATION WHEN COMPARED WITH AGE-MATCHED HEALTHY CONTROLS AND PATIENTS WITH OTHER MALIGNANCIES: OUR EXPERIENCE.

AUTHORS

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ABSTRACT

CONTEXT: Hodgkin lymphoma and Non-Hodgkin lymphoma survivors have to face long-term side effects of chemotherapy, premature ovarian failure, and even infertility.

OBJECTIVE: The aim of the study was to analyze if female patients with lymphoma have a reduced ovarian reserve even prior to chemotherapy, as demonstrated by ovarian function tests and response to controlled ovarian hyperstimulation (COH).

METHODS: The clinical and laboratory data of all patients regarding hormones and ovarian reserve tests were prospectively screened. Measurements of antimüllerian hormone (AMH), follicle-stimulating hormone (FSH) and antral follicle count (AFC) were analysed.

PATIENTS: 9 patients with newly diagnosed lymphoma referred to our center for COH for fertility preservation were compared with 14 patients with other types of malignancy undergoing fertility preservation and 18 healthy controls undergoing COH for in vitro fertilization.

INTERVENTION(S): we prospectively evaluated clinical and laboratory data of patients undergoing COH in our 3 groups.

MAIN OUTCOME MEASURE(S): Primary outcomes included serum AMH and FSH levels, and AFC. Secondary outcomes were number and quality of oocytes collected at pick up after a conventional GnRH antagonist short stimulation protocol.

RESULTS: Patients in the lymphoma group demonstrated lower AMH levels and AFC, higher FSH levels and had less oocytes collected and reduced oocyte quality when compared to healthy controls as well as patients with other malignancies.

CONCLUSION(S): Patients with lymphoma show diminished ovarian reserve and worse response to COH when compared with healthy controls and patients with other malignancies. This should be taken into consideration when deciding on the protocol and dose for COH.

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