

Title EVALUATION OF POST-TREATMENT FERTILITY IN PATIENTS WITH  
CANCER IN A SPERM BANK

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**INTRODUCTION:** Few reports exist regarding the correlation between posttreatment fertility in patients with malignant diseases, and its relationship with specific therapies. The need for sperm banking in this group of patients remains controversial.

**METHODS:** Fifty-six patients diagnosed with cancer, who requested to discard their stored cryopreserved specimens between 1993 and 1996 were included in the study. Medical records were reviewed and all living patients ( $n = 35$ ) were interviewed concerning the timing and type of treatment (surgery, radiation therapy, or chemotherapy), and posttreatment fertility status.

**RESULTS:** Twenty-three patients had a diagnosis of testicular cancer, 19 had Hodgkin's disease, 8 had leukemia, 2 had colon cancer, 2 had sarcoma, and 2 had lung cancer. Most patients with testicular cancer were alive after treatment, 21/23 (91%) and 14/21 (67%) regained fertility and had children. Of patients with Hodgkin's disease, 8/19 died after treatment. Of the 11 living patients, 5 have had children. Of patients with other types of cancers, 11/14 have died; 2/3 survivors have had children after treatment. All patients achieving pregnancy (21/35, 60%) did so naturally except for one who had a successful third-cycle intrauterine insemination. Six out of 23 patients with testicular cancer (26%) had chemotherapy, and 9/23 (39%) had radiation therapy. In patients with Hodgkin's disease, 15/19 (79%) received chemotherapy and 10/19 (53%) radiation therapy. Patients in the three groups did not differ in age, number of cryopreserved specimens, or interval between diagnosis and treatment.

**DISCUSSION:** The group of patients with testicular cancer had better fertility status than those patients who survived treatment with Hodgkin's or leukemia. In spite of the return of fertility in some of our cancer patients, we still recommend that sperm banking should be strongly encouraged for all patients with cancer who may wish to have children in the future.