

Semen Bank profile: Sperm cryopreservation is always indicated for patients undergoing cancer treatment?

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BACKGROUND: Semen cryopreservation as fertility preservation method has been used in various situations, especially in cases where the individual has or will have progressive loss of fertility, as before treatment of cancer. However, few patients and physicians know the importance of preserving fertility before procedures such as chemotherapy, radiation therapy and other immunosuppressive therapies

HYPOTHESIS: To determine the patients profile of a private semen bank to understand what are the main indications for sperm cryopreservation.

METHODS: Were included 132 samples of men aged 16 to 69, between 2000 and 2014, submitted to cryopreservation process. Collected samples were from ejaculate, parenchyma and epididymis fragments, and patients who did not sign the Informed Consent were excluded. Samples were classified into two groups: patients with cancer diagnoses (I) and patients who sought the clinic due to some andrological/urological situation (II). The means were compared between groups using T test for independent samples and adopted $p < 0.05$.

RESULTS: Group I consisted of 60 subjects (45.45%) with a mean age of 31.19 y.o. (± 9.84) and group II 72 patients (54.55%) with 40.65 y.o. (± 10.45), showing a lower incidence of cancer patients at the sperm bank. Among cancer patients, the highest incidence was in patients with testicular cancer ($n = 20$; 33%), followed by leukemia ($n = 7$; 11.6%) and lymphoma Hodking ($n = 3$; 5%). Cryopreservation should be performed before any gonadotoxic treatment and oncology medical staff must be prepared to discuss the issue with the patient. Unfortunately, the reality of the sperm bank shows that multidisciplinary teams are not able to provide complete information about fertility and the risk that the treatment may have on it. This study demonstrated a higher prevalence of testicular tumor in cryopreserved samples, however, all cancer patients who will undergo immunosuppressive treatment should be informed of the possibility of preserving fertility. Thus, the population specializing in medical oncology must be informed and clarify the patient, especially young people who wish to have children, about the chances of loss of fertility and the possibility of preservation with cryopreservation.

KEYWORDS: Preservation of fertility, cryopreservation, sperm, sperm bank.