AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION (HSCT) DURING THE RUSSIAN AGGRESSION IN 2022-2023 AT THE KYIV NATIONAL CANCER INSTITUTE (NCI)

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INTRODUCTION

During the first month of the full-scale invasion, the NCI bone marrow transplant (BMT) department was working in war conditions, including a bomb shelter. After the bone marrow reconstruction of the last 4 patients, the department's activity was temporarily stopped and restarted again 3 months later in June 2022. Patients on the waiting list were sent abroad for treatment during this time. In 2023, the BMT department continues to work and even increased its intensity.

METHODS

We collected information regarding HSCT procedures performed at NCI since the war started and analyzed in comparison to previous time periods. For 8.5 months of 2022, and 5 months of 2023, the number of HSCT procedures performed in NCI was 37 and 29, respectively (including 11 pediatric patients). (Fig 1) Thus, during the 1st quarter of 2023, 2.3 times more HSCT in adult patients were performed compared to the same period of previous years.

RESULTS

55 adult patients (30 male/25 female; median age 51.2 [20–69] years) received HSCT in NCI over the 18 months from the beginning of the full-scale war. At least 15 patients were from the occupied territories or zones of military action, 8 patients were alone (without family to support them). 27 patients had multiple myeloma (MM)/PL, 14 – Hodgkin lymphoma, 14 – non-Hodgkin lymphoma (NHL). Among NHL cases were: 6 – mantle cell lymphoma, 4 – diffuse B-cell lymphoma, 1 – primary central nervous system was recorded (Fig 2). Median stem cell dose was 6.65×10^6/kg (range 2.9–17.5). Median neutrophil engraftment was 16 days (range 10–32), median platelet engraftment was 19 days (range 15–29).

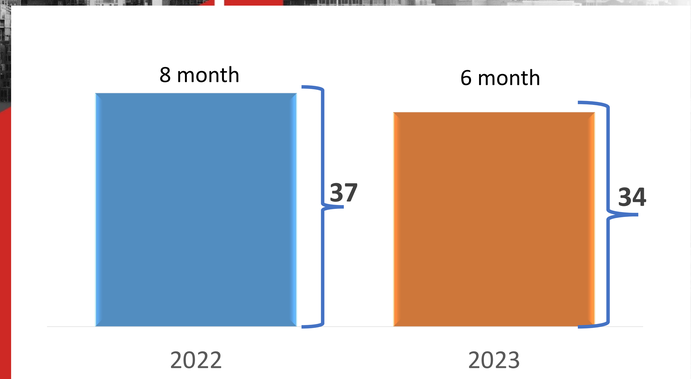


Figure 1. Transplant activity at NCI (2022-2023)

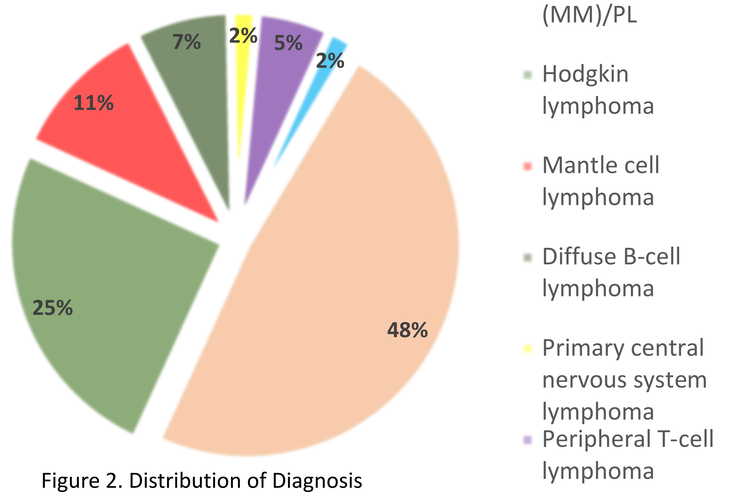


Figure 2. Distribution of Diagnosis

CONCLUSIONS

The Russian aggression against Ukraine impaired the access of Ukrainian patients to HSCT. Despite the continuing military actions, the drop-off in the number of HSCTs in the NCI was temporary. Our data shows increasing activity of HSCT at the NCI in adult patients. There is still a great unmet need Ukrainian patients to accesses HSCT in the occupied territory of Ukraine.

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