

**FC-040****Experience in the treatment of Ewing's sarcoma of the pelvis in children. East European Sarcoma Group**

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**Objectives:** The aim of our study was to determine treatment outcomes in two protocols: 1) using high-dose chemotherapy and autologous peripheral blood stem cell transplantation (HDCT/autoPBSCT) and 2) protocol with decreasing doses of chemotherapy in pediatric patients with Ewing's sarcoma of pelvis treated at the East European Sarcoma Group (Russian Oncology Research Center N.N.Blokhin).

**Methods:** We retrospectively analyzed the data of patients with Ewing's sarcoma of pelvis who received HDCT/autoPBSCT and who received CT with decreasing doses of (VAC/IE) between 1997-2011y. All patients receive the same mode neoadjuvant chemotherapy regimens 5 courses (VAC, vincristine 1.5mg/m<sup>2</sup> 1,8,15 days i.v. + Adriamycin 37.5mg/m<sup>2</sup> 1,2 days i.v. + Cyclophosphamide 2.1gr/m<sup>2</sup> 1,2 days i.v. and IE, Ifosfamid 2.4gr/m<sup>2</sup> 1-5 days i.v. + Etoposide 100mg/m<sup>2</sup> 1-5 days i.v.).

**Results:** The first group of patients included 31 children who received HDCT/autoPBSCT with radiation therapy to the lungs (metastatic disease) and pelvic bones. Metastatic disease was found in 42% of patients. The average tumor volume was 345ml. Middle age was 11.5 y.o. High-dose chemotherapy was performed in only 25 patients, 6 patients died from complications of chemotherapy prior to HDCT/autoPBSCT.

The second group included 21 patients who received treatment in the adjuvant regime with a reduction dosage of VAC/IE (-30%). Metastatic disease was found in 33% of patients. The average tumor volume was 298ml. Middle age was 12.7 y.o. Only one surgery was performed with P3 resection (Enneking classification).

The third group of 9 children, patients treated without any protocol.

Overall 1-,3-,5-y survival after HDCT/autoPBSCT were 70%, 39%, 39%. Median was 17.2 months in first group. With metastatic disease overall 1-,3-,5-y survival were 46%, 7%, 7%. Median was 10.2 months. With non metastatic disease overall 1-,3-,5-y survival were 88%, 64%, 64%. Median not reached. Analyze data from patients in the second group, we obtained the following results overall 1-,3-,5-y survival were 100%, 70.5%, 58.8%. Median not reached. With metastatic disease overall 1-,3-,5-y survival were 100%, 68.5%, 34.2%. Median not reached. With non metastatic disease overall 1-,3-,5-y survival were 100%, 71.4%, 71.4%. Median not reached. Data is valid (p=0.008).

**Conclusion:** Although we obtained the best survival data in the second group than the first using HDCT/autoPBSCT, are different by selection the data volume of the primary tumor and rate of metastatic disease. Requires further study and monitoring of patients undergoing treatment for Ewing's sarcoma of the pelvis.