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learning more about fertility and mental health, with a preference for digital information.

Conclusions: This study highlights the significant long-term health impacts and the urgent need for region-specific survivorship care that addresses both physical and mental health concerns in Latin American CCSs. Gaps in mental health and fertility-related information require immediate attention, with a clear need for tailored interventions and accessible resources to enhance the well-being of survivors in the region.

PO795 / #1061 | *AS05 - SIOP Scientific Program / AS05t. Survivorship*

Thyroid Abnormality in Childhood Cancer Survivors in a Tertiary Care Hospital in Bangladesh

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Background and Aims: Childhood cancer survivors (CCS) are at increased risk for long-term complications, including thyroid abnormalities, due to the effects of cancer treatment such as radiation and chemotherapy. Variable percentage of childhood cancer might have experienced thyroid disorder. So, the aim of the study was to provide baseline information regarding thyroid disorders among survivors of our center.

Methods: This observational study was conducted in the Department of Pediatric Hematology and Oncology, BSMMU, for a period of 1 year. Total 133 children who completed treatment for at least 1 year were included. Meticulous history and thorough examination were performed to find evidence of thyroid disorders. Data collected included demographics, primary cancer diagnosis, treatment modalities (chemotherapy, radiation therapy, surgery), and thyroid function test results (TSH, free T4, free T3). Thyroid abnormalities were defined based on standard laboratory reference ranges. USG of thyroid and anti-thyroid antibody assay were reserved for those having thyroid abnormality. Statistical analysis was performed to determine the prevalence of thyroid abnormalities and to identify potential risk factors associated with their development.

Results: Among the 133 studied cases, 87 (65.4%) were male and 46 (34.6%)were female, male to female ratio was 1.85:1. Age of enrolment was 3-31 years with a mean of 13.21 ± 5.03 years. Mostly 90 (67.7%) were ALL cases, followed by Lymphoma, AML, Neuroblastoma, Wilms tumor, Hepatoblastoma and others. Thyroid abnormality was detected in 6 (4.5%) patients. Hypothyroidism was found in 4 (66.6%) cases and in 2 (33.3%) cases had sub-clinical hyperthyroidism. All of them received only chemotherapy except one who needed abdominal surgery. No positive correlation between types of cancer and time elapsed after completion of treatment to development of thyroid abnormality.

Conclusions: Thyroid abnormality was found in 4.5% of survivors with predominant subclinical hypothyroidism. Rate of detection was not in increasing trend over time and types of cancer in this cohort.

PO796 / #2066 | *AS05 - SIOP Scientific Program / AS05t. Survivorship*

Return of the Dragon: Second Malignancies in Children With Cancer, Data From a Tertiary Care Pediatric Oncology Centre

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Background and Aims: Childhood cancer outcome has improved over years unravelling newer problems in survivors. Second malignancies is one of them, which may or may not be related to an underlying genetic defect and/or therapy. We analysed data on second malignancies in our patients to get better insights on role of genetics in guiding management of these patients.

Methods: Patient records of all patients 0-18 years, who were treated with cancer from January 2019 to January 2025 in a pediatric oncology centre in India, were evaluated. Records of patients who developed second malignancy different from primary, were noted.

Results: Second malignancy was seen in 7 patients with mean age at first malignancy 7.5 (3-16 years) and mean gap between two malignancies was 4.4 (2-10 years). First malignancies were Acute lymphoblastic leukemia (ALL) (4/7), one each with Burkitt's lymphoma (BL), Ewings sarcoma and Rhabdomyosarcoma. Second malignancies were ALL (3/7), Bone tumors (2/7), BL (1/7) and Langerhans cell histiocytosis (1/7). Only two patients had physical stigmata of cancer predisposition syndrome and sibling history of malignancy. Genetic testing was done in 6/7 patients at the time of second malignancy, which revealed constitutional mismatch repair deficiency syndrome (CMMRD) in 3/7 (42.8%), dual mutation in NF1 and TP53 gene (1/7), Variant of uncertain significance (1/7) and no pathogenic mutation (1/7). Patients with CMMRD did not do well, one succumbed to induction therapy, one to relapse in second malignancy and third is on palliative care for third malignancy.

Conclusions: Most second malignancies are reported later in adulthood in childhood cancer survivors in literature. In our study, patients with disorders like CMMRD had multiple cancers within few years span in childhood and dismal outcome. Genetic testing of all children with cancer shall allow the oncologists appropriate treatment decisions, formulate surveillance plan and early involvement of palliative care services to support families.

PO797 / #448 | *AS05 - SIOP Scientific Program / AS05t. Survivorship*

Retrospective Evaluation of Acute and Chronic Cardiotoxicity Due to Anthracyclines in Pediatric Oncology Patients Diagnosed With Lymphoma and Solid Tumors

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Background and Aims: To evaluate cardiotoxicity in patients who received anthracycline therapy at our center between 2013 and 2024.
Methods: A retrospective analysis was conducted on 287 patients diagnosed with lymphoma or malignant solid tumors.
Results: The male-to-female ratio was 1.16, and the median age at diagnosis was 80 months. At diagnosis, 9 patients (3%) had pre-existing heart disease, and 35 patients (12%) had a family history of heart disease. Among the patients, 31.7% (n = 91) were diagnosed with lymphoma, while 68.2% (n = 196) had a solid tumor. Mediastinal involvement was present in 29.3% of patients, and 9.4% had a history of mediastinal radiotherapy. The vast majority (98.2%) received only doxorubicin as part of their treatment. The overall incidence of cardiotoxicity was 14.6% (n = 42), with 69.0% classified as acute, 11.9% as early-onset chronic, and 19.1% as late-onset chronic cardiotoxicity. Tachycardia was the most common acute cardiotoxicity finding, and sinus tachycardia was the most frequent ECG abnormality. Cardiac biomarker positivity was detected in 10 patients. Among the five patients who developed early-onset chronic cardiotoxicity, one had a cumulative anthracycline dose of 450 mg/m^2. Nine patients developed late-onset chronic cardiotoxicity, with one patient reaching a cumulative dose of 480 mg/m^2. There was no significant difference in cardiotoxicity incidence concerning age, sex, or diagnosis of lymphoma vs. solid tumor. Comparing echocardiographic findings before and after anthracycline treatment, a reduction in ejection fraction was observed in the cardiotoxicity group. Mitral regurgitation was also more prevalent in the cardiotoxicity group. The use of methotrexate, VEGF inhibitors, and mifamurtide was found to be associated with an increased risk of cardiotoxicity. No significant difference was observed in relation to infusion duration, but the risk of cardiotoxicity increased with the number of chemotherapy cycles and cumulative anthracycline dose. Survival analysis revealed that one patient died due to heart failure.
Conclusions: Despite efforts to detect and prevent anthracycline-induced cardiotoxicity at an early stage, this side effect remains a dose-limiting concern. The cardiotoxicity rate observed at our center was found to be consistent with the literature.

PO798 / #1936 | *AS05 - SIOP Scientific Program / AS05t. Survivorship*

Dental Adverse Effects Following Multimodality Treatment for Head and Neck Rhabdomyosarcoma; Results of a Trans-Atlantic Multicentre Study

Koen Krommenhoek[1, 2], Marinka Hol[2, 3], Olga Slater[4], Mark Gaze[4, 5], Willem Fennis[6], Frederic Kolb[7], Ludwig Smeele[1, 8], Danny Indelicato[9], Reinier Hoogeveen[10], Alfred Becking[1], Hans Merks[2, 11]

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Background and Aims: As survival of paediatric cancer improves more emphasis is placed on late adverse effects. However, dental and periodontal adverse effects of cancer treatments in children remain an under investigated complication. This study aims to investigate the prevalence of late clinical dental adverse effects (cDAE) in survivors of paediatric head and neck rhabdomyosarcoma (HNRMS).
Methods: Between 2017 and 2019, we collected data in a collaborative study between four international centres. During a 'late adverse effect clinic', dentists examined HNMRS survivors treated with multimodality therapies for dental and periodontal adverse effects using the following validated indexes scores 'Simplified Oral Hygiene index' (SOHI), the 'Decayed, Missing and Filled Teeth' (DMFT) score and the 'Dutch Periodontal Screening Index' (DPSI).
Results: Forty-six survivors, with a median follow-up of 9.9 years (range 2-29.7) were included. The survivors of HNRMS had significant plaque accumulation. The median DMFT score was 3.00 (range 0-26) which is considered normal. However, approximately a quarter of the survivors had exceptionally high DFMT scores, indicating many teeth were missing or filled. Affected gingivae, unhealthy gums, were seen in 60.9% of survivors of HNRMS.
Conclusions: Survivors of HNRMS have higher plaque and gingivitis rates, possibly due to cancer treatment and/or poor oral hygiene and diet. Next to regular care, additional monitoring of oral health and support of oral hygiene is indicated. Survivors, parents, and physicians should be aware of the dental and periodontal risks and ensure proper care is available.

PO799 / #1957 | *AS05 - SIOP Scientific Program / AS05t. Survivorship*

Dental Developmental Problems in Head and Neck Rhabdomyosarcoma Survivors, a Cross Sectional Cohort Study

Koen Krommenhoek[1, 2], Reinier Hoogeveen[3], Willem Fennis[4], Erwin Berkhout[3], Raquel Dávila Fajardo[2, 5], Ludwig Smeele[1, 6], Hans Merks[2, 7, 8], Alfred Becking[1], Marinka Hol[2, 9]

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