As the number of survivors of young female Hodgkin's lymphoma (HL) increases, it is becoming more common to manage the pregnancies of women who have a history of exposure to chemotherapies and radiation therapy. Many patients and clinicians are worried that pregnancy after the diagnosis of HL may increase the risk of relapse, despite a lack of empirical evidence to support such concerns.
In the present study we included 77 women who received a diagnosis of HL between 2006 and 2015 and who were younger than 40 years of age and were in complete remission and alive without relapse > 2 years after treatment.
Among the 77 women with HL, 37 (48%) were nulliparous throughout follow-up, 32 (42%) were parous but had no pregnancies during follow-up, and 8 (10%) had a pregnancy during follow-up.
13 (17%) tried to become pregnant; 5/13 (39%) without success; 8/13 (61%) women became pregnant with the birth of eight healthy children. The overall pregnancy rate was 10%. The median time from the end of the therapy to pregnancy was 50 months (range 25–72 months) and the cumulative incidence of pregnancy at 70 months was 39% Median age at pregnancy was 27 years (range 20–37 years).
In total, 2 relapses occurred during follow-up: none occurred in woman with a recent pregnancy Women exposed to a recent pregnancy had a relapse rate lower than that of women without exposure, although this difference was not statistically significant.
Conclusion: We found no evidence of significant impairment of the fertility of female HL long term survivors and no evidence that a pregnancy increases the relapse rate among women whose HL is in remission. Survivors of HL need to consider a range of factors when deciding about future reproduction.

P055 (0096) HEALTH-RELATED QUALITY OF LIFE (HRQL) TRAJECTORIES DURING TREATMENT FOR ADVANCED STAGE PEDIATRIC HODGKIN LYMPHOMA (HL)

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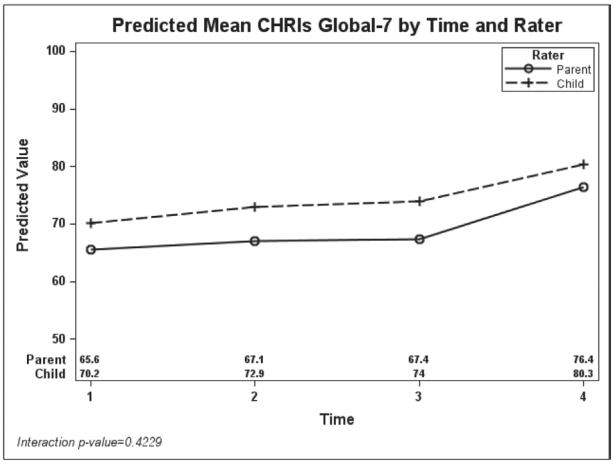
Background: The treatment of advanced stage HL typically includes dose-dense chemotherapy with or without involved field radiation. However, little is known about the HRQL of pediatric patients during initial treatment. We describe the HRQL trajectory over time by child and parent-proxy rater and examine baseline patient characteristics associated with the trajectory.
Methods: Children and adolescents, ages 5–17.9 years newly diagnosed with advanced stage HL and enrolled in Children's Oncology Group AHOD 1331, and their parents were co-enrolled in an embedded study to assess HRQL (n = 310). Children (age ≥11 years) and parent proxies (of children 5–17.9 years) reported on the child's global HRQL using the Child Health Rating Inventories (CHRIs) at four times: (1) baseline, (2) cycle 2, (3) cycle 5, and (4) end of therapy, approximately 6–7 months following initial diagnosis. The 7-item CHRIs-Global yields scores that range from 0–100, with higher scores indicating better HRQL. A repeated measures linear regression model was fit with categorical time (reference, baseline), rater, child race, ethnicity, and continuous age. An interaction of rater and time was tested and predicted means were plotted.
Results: 97% of age-eligible patients and parents completed baseline HRQL assessments with 93% completing planned follow-ups. Median child age was 15.5 years (q1 = 5.4, q3 = 18.9) and 50.3% were female. Most children were white (76.1%) and non-Hispanic (82.6%). There was no significant interaction between rater and time (Figure), so this was subsequently excluded from the model. Scores improved slightly at time 2 (β=2.5, 95%CI = 0.3, 4.6) and 3 (β=2.8, 95%CI = 0.3, 5.3) compared to baseline; larger improvements were seen by time 4 (β=10.6, 95%CI = 7.9, 13.3) after completion of therapy. Children reported higher HRQL than their parent proxies (β=5.6, 95%CI = 3.9, 7.2), males had higher HRQL than females (β=4.6, 95%CI = 1.0, 8.3), and older age was associated with lower HRQL (β = −0.8, 95%CI = −1.5, −0.1). There was no significant effect of race or ethnicity.
Conclusions: Completion rates of HRQL were high across all time periods and for both raters. HRQL, impaired at baseline, likely from the disease process, improved slightly during treatment, with larger improvements by the end of initial therapy. Future research will examine how clinical and treatment factors impact the HRQL trajectory.



P056 (0097) COGNITIVE DYSFUNCTION AFTER TREATMENT FOR HODGKIN LYMPHOMA

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Introduction: Using up-to-date methods of clinical investigation and risk and response adapted therapy, 80–85% of patients with Hodgkin-lymphoma (HL) show long-term survival and recovery. However, the long-term side effects associated with the treatment become more prominent. One such well-known side effect is cognitive dysfunction that appears in HL patients after chemotherapy. During our work we aimed at measuring cognitive dysfunction in our HL patients, looking for correlations between the patients and their disease and the factors involved in the treatment.
Materials and Methods: We carried out a computer assisted assessment (Cambridge Neuropsychological Test Automated Battery-CANTAB) of cognitive dysfunction in 118 patients treated at the Department of Haematology. We examined the domains of visual memory, functions of attention, working memory and planning. We regarded as having reduced cognitive function patients who performed worse than the normal population by 1.5 standard deviation or if the results of at least one test was already positive.
Results: Median mean age of 64 females and 54 males at diagnosis was 29 (13–74), and 41 (21–81) years at completion of the CANTAB investigation; this examination took place 11 years (0.5- 44) after diagnosis. 52.5% of all patients examined showed cognitive decay. In 35% (42/118) of patients it was attention that suffered, working memory and planning were damaged in 25%, (30/118) while visual memory was affected in 22% (26/118 patients). All three functions showed significant correlation with age at diagnosis and at the time of the examination A close correlation was found between attention and inactive employment and radiation therapy on the one hand and another correlation between working memory and planning and disability pensioner and inactive status on the other. Visual memory showed a close correlation with disability pension and inactive employment status and the effects of persistent drug use on the central nervous system.
Conclusions: Our results draw attention to the fact that, like with other malignant diseases, cognitive decay is a real problem in patients with HL. In our patients damage to the attention function was the most detectable. Our investigation suggests that patients with inactive employment status require enhanced attention. Their cognitive function and, through that, their quality of life can be improved by their retun to work if possible or by the use of cognitive therapy.

P057 (0108) COGNITIVE IMPAIRMENTS IN PATIENTS WITH HODGKIN'S LYMPHOMA

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