Outcomes after initial refusal of curative treatment in patients with Hodgkin lymphoma in British Columbia

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Introduction

Despite excellent outcomes for classical Hodgkin lymphoma (cHL) with standard combination chemotherapy regimens, some patients delay or decline conventional treatment. We retrospectively assessed the impact of initial treatment refusal on outcomes of patients with cHL in British Columbia (BC).

Methods

Using the BC Cancer Lymphoid Cancer Database, we identified all patients aged 18-70 diagnosed between 1¹st Jan 1999- 3¹st Dec 2020 who initially refused treatment (‘refusers’; not receiving/delaying treatment > 16 weeks). We identified a control cohort (min. 3 controls/refuser) treated < 8 weeks of diagnosis, matched for age, stage, diagnosis date within 3 years, and blinded for outcome. All patients had centrally reviewed biopsies and were treated with ABVD or ABVD-like regimens +/- radiotherapy. Patient and disease characteristics at baseline and at time of treatment were analyzed with Chi-squared test and one-way ANOVA test. The Kaplan-Meier method was used to assess progression-free survival (PFS) and overall survival (OS).

Results

We identified a cohort of 15 patients who initially refused treatment and 47 matched controls. There were no statistically significant differences in baseline characteristics between groups. The most common reason for refusal was to pursue alternative therapy (73%). 13 of 15 refusers eventually accepted treatment (mean time to treatment 76 weeks [range 26-214] vs. 5 weeks [range 1-8] for controls, p < 0.001). At time of treatment, the proportion of refusers with advanced-stage disease increased from 20% to 62% (p = 0.03) and had an associated change in treatment plan, and 62% of patients developed higher risk disease with increased IPS score (p = 0.02). At median follow-up of 5 years for all living patients, estimated 5-year PFS was 65% vs 84%, and 5-year OS was 93% vs 98% for refusers and controls respectively. With extended follow up, 13% of refusers (1 late death at 8 years) compared to only 4% of controls died of cHL specifically.

Conclusion

This study highlights the impact of treatment refusal in this highly curable malignancy. Initial refusal of treatment is associated with progression of stage, worsening prognostic score, escalation to more prolonged treatment than required at diagnosis, and increased risk of death from cHL. This analysis may help to provide guidance to counselling physicians, as well as inform patients who may be considering alternatives to standard of care for cHL.