

Clinical trial of Pediatric Hodgkin Lymphoma in Japan and Next Trial Plan

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Introduction

Pediatric Hodgkin Lymphoma (HL) accounts for approximately 10-20% of lymphoma in pediatric patients, and the incidence of pediatric HL is lower in Japan than in Western countries. Here, we assess a multicenter, single-treatment trial (HL-14) that commenced in 2015 in Japan to determine the risk-adapted omission of radiation therapy for patients with negative fluorodeoxyglucose-positron emission tomography (FDG-PET) results, following an initial treatment response to combination chemotherapy.

Methods

Patients with untreated HL aged <20 years at diagnosis are enrolled. The Japanese Pediatric Leukemia /Lymphoma Study Group, Japan Children's Cancer Group (JPLSG, JCCG) HL-14 study will examine the effects of omitting radiation therapy if the FDG-PET findings after two completed cycles of combination chemotherapy are negative. Low-risk patients (stage IA, IB, and IIA) receive two cycles of OEPA (vincristine, etoposide, prednisolone, and doxorubicin) (boys) or OPPA (vincristine, procarbazine, prednisolone, and doxorubicin) (girls). Intermediate-risk patients (stage IEA, IEB, IIEA, IIB, and IIIA) receive two cycles of OEPA (boys) or OPPA (girls) and two cycles of COPDAC (cyclophosphamide, vincristine, prednisolone, and dacarbazine) (boys) or COPP (cyclophosphamide, vincristine, procarbazine, and prednisolone) (girls). High-risk patients (stage IIEB, IIIEA, IIIEB, IIIB, IVA, and IVB) receive two cycles of OEPA (boys) or OPPA (girls) and four cycles of COPDAC (boys) or COPP (girls). If the PET2 results are negative, no radiation therapy will be administered. All patients with positive PET2 results will receive involved-field, involved-site, or node radiation therapy (20–36 Gy) following the completion of chemotherapy.

Results

52 cases were recruited. Our trial is in observation period.

Conclusion

This trial aimed to determine, within the confines of safety, whether assessing treatment response using

PET (which is highly sensitive and specific) was effective for Japanese. In our next study, we plan to assess the safety and treatment response of brentuximab vedotin, which is used to treat cases of relapse in Japan, in early induction therapy using evaluation with PET2.

Affix**References**

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