

Procarbazine-free OEPA-COPDAC chemotherapy in boys and standard OPPA-COPP in girls have comparable effectiveness in pediatric Hodgkin's lymphoma: the GPOH-HD-2002 study.

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Source

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Abstract

PURPOSE: Vincristine, etoposide, prednisone, and doxorubicin (OEPA)-cyclophosphamide, vincristine, prednisone, and dacarbazine (COPDAC) is derived from standard vincristine, procarbazine, prednisone, and doxorubicin (OPPA)-cyclophosphamide, vincristine, procarbazine, and prednisone (COPP) chemotherapy by replacing procarbazine with etoposide and dacarbazine for a potentially less gonadotoxic regimen for boys with Hodgkin's lymphoma (HL).

PATIENTS AND METHODS: Five hundred seventy-three pediatric patients with classical HL were enrolled onto the German Society of Pediatric Oncology and Hematology-Hodgkin's Disease (GPOH-HD) -2002 study between November 2002 and December 2005. Boys received two courses of OEPA and girls received two courses of OPPA for induction. Treatment group (TG) -2 (intermediate stages) and TG-3 (advanced stages) patients received further two or four cycles COPP (girls) or COPDAC (boys), respectively. After chemotherapy all patients received involved-field irradiation with 19.8 Gy, except for patients with early-stage disease (TG-1) in complete remission.

RESULTS: Five hundred seventy-three patients (287 males and 286 females) were less than 18 years old and fulfilled all inclusion criteria; 195 patients (34.0%) were allocated to TG-1, 139 (24.3%) were allocated to TG-2, and 239 (41.7%) were allocated to TG-3. Toxicity of OEPA-COPDAC was tolerable overall. Hematotoxicity was more pronounced with OEPA than OPPA, whereas it was less pronounced with COPDAC compared with COPP. The median observation time was 58.6 months. Overall survival and event-free survival (EFS) rates (+/- SE) at 5 years were 97.4% +/- 0.7% and 89.0% +/- 1.4%, respectively. In TG-1, overall EFS was 92.0% +/- 2.0%. EFS of patients without irradiation (93.2% +/- 3.3%) was similar to that of irradiated patients (91.7% +/- 2.5%), confirming results of the previous GPOH-HD-95 study. In TG-2+3, EFS did not significantly differ between boys and girls (90.2% +/- 2.3 v 84.7% +/- 2.7, respectively; P = .12).

CONCLUSION: In TG-2+3, results in boys and girls are superimposable. OPPA-COPP and OEPA-COPDAC seem to be exchangeable regimens in intermediate- and advanced-stage classical HL in pediatric patients.