

# Result of therapy for Hodgkin Lymphoma (HL): a report from the Chilean pediatric National Cancer Program (PINDA)

**E. Concha**<sup>1</sup>, M. Cordova<sup>2</sup>, A. Becker<sup>3</sup>, C. Rizzardini<sup>4</sup>, C. Salgado<sup>5</sup>, V. Perez<sup>6</sup>, E. Fernandez<sup>10</sup>, F. Espinoza<sup>7</sup>, P. Martinez<sup>12</sup>, M. Valero<sup>9</sup>, L. Neira<sup>8</sup>, M. Arriagada<sup>11</sup>

<sup>1</sup> Hospital Luis Calvo Mackenna, Hematology and oncology department, Santiago, Chile

<sup>2</sup> Hospital Sótero del Río, Hematology and oncology department, Santiago, Chile

<sup>3</sup> Hospital Sótero del Río, Hematology and oncology department, Santiago, Chile

<sup>4</sup> Hospital Roberto del Río, Hematology and oncology department, Santiago, Chile

<sup>5</sup> Hospital Exequiel Gonzalez Cortes, Hematology and oncology department, Santiago, Chile

<sup>6</sup> Hospital San Juan de Dios, Hematology and oncology department, Santiago, Chile

<sup>7</sup> Hospital San Borja Arriarán, Hematology and oncology department, Santiago, Chile

<sup>8</sup> Hospital Gustavo Fricke, Hematology and oncology department, Viña Del Mar, Chile

<sup>9</sup> Hospital Van Buren, Hematology and oncology department, Valparaiso, Chile

<sup>10</sup> Hospital Guillermo Grant Benavente, Hematology and oncology department, Concepción, Chile

<sup>11</sup> Hospital Dr. Hernan Henriquez Aravena, Hematology and oncology department, Temuco, Chile

<sup>12</sup> Hospital Base Valdivia, Hematology and oncology department, Valdivia, Chile

## Introduction

**Objective:** the aim of this study was to analyze the event-free survival (EFS) and the overall survival (OS) of children with HL treated by the PINDA-99 protocol, based in the Children´s cancer group 1995 (CCG-5942)

## Methods

**Patients and Methods:** 119 patients were registered on this trail between January 1999 and April 2005 at our country (public health). Low risk (LR) were stages IA, IB and IIA (no bulky disease (<10 cm), < 4 involved ganglionar areas and no lung hilar nodes), high risk (HR) were stages II B, III A, III B, IV, bulky mediastinum and bulky disease (>10 cm). Chemotherapy for LR was 4 cycles of the COP/ABVD hybrid scheme (cyclophosphamide, vincristine, prednisone, doxorubicin, bleomycin, vinblastine and dacarbazine) and low-dose involved field radiotherapy (RT) only in case of partial remission (PR) at the end of chemotherapy (21 Gy in initially involved areas, plus 14 Gy boost on residual disease). The HR group was treated with 6 cycles of hybrid COP/ABVD, using RT only in PR and in patients with diagnosed bulky mediastinum.

## Results

**Results:** The male to female ratio was 2:1 (80 men and 39 women). The median age at diagnosis was 8,5 years old (range, 2.6 to 15 y). Histology was obtained in 112/119 patients: Mixed-cellularity 49 (44%) Nodular sclerosing 44 (39%) Lymphocyte-rich 9 (8%) Lymphocyte depleted 2 (2%) Not classifiable 8 (7%). 46 patients (41%) were assigned to LR: Stage IA 11/113 (10%) IB 5/113 (4%) IIA 30/113 (27%). 67 patients (59%) were assigned to HR, IIB 15/113 (13%), IIIA 18/113 (16%), IIIB 20/113 (18%), IVA 0 and IVB 14/113 (12%). B symptoms presents in 53/113 (47%). 61 patients (51%) received RT, 46 not achieved complete remission (CR) after chemotherapy (4 or 6 cycles LR or HR respectively) and 15 had bulky mediastinum. 9 relapsed (7,5%) and 5 of them remained in second CR after further therapy. 3 (2.5%) had a second cancer (one osteosarcoma and two thyroid cancer, all in irradiated site). 7 patients dead (5.8%), 5 for illness (1 did not respond to initial therapy and 4 died in relapsed), 1 for infection and 1 for second cancer

(osteosarcoma in irradiated bone). OS was 94 % and EFS was 89% with a median follow -up of 10 years.

### **Conclusion**

**Conclusions:** Avoiding RT in patients that RC to chemotherapy COP/ABVD hybrid scheme had excellent results both LR and HR. In our protocol nearly half of the patients could be cured without RT. Second cancer were observed only in irradiated patients, and one of them died for that, being in remission of hodgkin disease.

### **Acknowledgment**

Without conflicts of interest