Anemia: frequency and type in pediatric patients with Hodgkin’s lymphoma

M. L. Oscanoa Gutierrez¹, C. Rivera¹, A. Yabar¹

¹ Hospital Nacional Edgardo Rebagliati Martins, Pediatric Oncology Unit, Lima, Peru

Introduction

a Pediatric Oncologist; b Resident Physician; c Pathologist.
Determine the frequency and type of anemia, before and after treatment in children and adolescents patients with Hodgkin lymphoma (HL) treated at Hospital Nacional Edgardo Rebagliati Martins (HNERM) from January 2007 to December 2018.

Methods

The presence of anemia was considered in male pediatric patients when hemoglobin was <13 g/dL, and female pediatric patients when it was <12 g/dL. Subsequently, to determine associations, the Chi-squared test was used. For the analysis, statistical analyses were done using percentage, anemia curves before and after the treatment and Student’s ‘t’ test.

Results

A total of 576 HL patients were included among children and adolescents. In which, 436 (76%) of them had solid tumors and 140 (24%) had lymphoma (non-Hodking lymphoma and Hodgkin lymphoma). Of which 33 (23.5%) cases corresponded to HL.

Afterwards, anemia was diagnosed in 22 (66%) patients with Hodgkin lymphoma. The type of anemia, both at the beginning and at the end of treatment, was microcytic anemia in the present study, most likely due to the fact that Hodgkin lymphoma is one of the pediatric cancer pathologies that tend to be chronic with time up to 12 months. Mild anemia was the most frequent according to the hemoglobin cut-off point to determine anemia.

Conclusion

After the cases review, it was determined that microcytic anemia is common in pediatric patients with Hodgkin lymphoma at the beginning, and at the end of treatment.