

Brentuximab vedotin (BV) in recurrent and refractory Hodgkin Lymphoma (HL) in children. Experience of Polish Pediatric Leukemia/Lymphoma Study Group

T. Klekawka¹, A. Moryl-Bujakowska², K. Smalisz³, J. Kwasnicka⁵, R. Chaber⁶, A. Wziatek⁷, T. Stachowicz-Stencel⁸, A. Brozyna⁴, A. Koltan⁹, M. Stolarska¹⁰, B. Przybyszewski¹¹, K. Zielezinska¹², W. Balwierz¹

¹ Jagiellonian University Medical College, Department of Pediatric Oncology and Hematology, Krakow, Poland

² University Children's Hospital of Krakow, Department of Pediatric Oncology and Hematology, Krakow, Poland

³ Warsaw Medical University, Department of Pediatrics, Hematology and Oncology, Warsaw, Poland

⁴ Children's Memorial Health Institute, Department of Oncology, Warsaw, Poland

⁵ Wrocław Medical University, Department of Pediatric Bone Marrow Transplantation, Oncology and Hematology, Wrocław, Poland

⁶ Clinical Hospital of Rzeszow, Oncohematology Clinic, Rzeszow, Poland

⁷ University of Medical Sciences, Department of Pediatric Oncology, Hematology and Transplantology, Poznan, Poland

⁸ Medical University, Department of Children's Oncology and Hematology, Gdansk, Poland

⁹ Nicolaus Copernicus University Collegium Medicum, Department of Pediatric Oncology and Hematology, Bydgoszcz, Poland

¹⁰ Medical University, Department of Pediatrics, Oncology, Hematology and Diabetology, Lodz, Poland

¹¹ Regional Specialized Children's Hospital in Olsztyn, Pediatric Oncology and Hematology Department, Olsztyn, Poland

¹² Pomeranian Medical University of Szczecin, Department of Pediatrics, Oncology and Hematology, Szczecin, Poland

Introduction

Brentuximab Vedotin treatment gives a chance of cure in patients who suffer from relapsing or refractory HL. In Poland BV started to be used in 2012, initially as monotherapy and later, since 2014 as a combination treatment with chemotherapy.

Methods

To estimate BV use in pediatric HL in Poland a questionnaire survey was performed. Questionnaires were sent to 17 pediatric oncology departments in Poland. Status of disease before BV treatment, prior treatment, BV treatment type, treatment response and patient's care after BV therapy were addressed.

Results

BV treatment has been in use since 2012 in 9 Polish pediatric oncology centers. It was introduced in 17 patients 7,3-22,3 (median: 15,9) years old with relapsing/refractory HL. Three patients developed disease progression before completion of first-line treatment, 14 patients completed first-line treatment of which 6 were treated without radiotherapy.

BV therapy was administered as second-line, third-line and fourth-line treatment in 12, 3 and 2 patients respectively.

BV monotherapy was used in earlier period (2012-2015), in 5 patients, who received 3-8 (median:5) BV cycles. In three cases further disease progression was observed and in 2 cases disease stabilization occurred. Two patients died of disease progression and one of allo-SCT complication. Two patients are alive after auto-SCT.

BV in combination with chemotherapy was used in 12 patients since 2014. In 2 cases BV-AVD was introduced, in 5 cases BV+Bendamustin and 5 patients received BV in combination with other chemotherapy protocols. In 9 cases BV combination therapy was used as a part of second line treatment, in 3 was used in second and further disease progressions. Death from progressive disease occurred in 2 cases and death from allo-SCT complications occurred in another 2 cases.

Conclusion

BV treatment was used in monotherapy initially and as a combination treatment in later period, initially as a salvage therapy after second and further disease progressions. As more data on combination treatment are available BV+chemotherapy is currently used as a part of second line treatment in patients not responding adequately to initial salvage chemotherapy. More efforts to increase availability of BV therapy in Poland are required as initially this therapy was lacking sufficient financing of public health system in Poland.