soho2023
ELEVENTH ANNUAL MEETING

A SUCCESSFUL TREATMENT OF RELAPSED/REFRACTORY MDN PATIENT WHO IS FOLLOWED UNDER HEMODIALYSIS

Bahar Sevgili MD[1], Tural Pashayev MD[2], Nur Soyer MD[1], Filiz Vural MD[1], Güray Saydam MD[1]
[1]*Ege University, Faculty of Medicine, Department of Hematology, Izmir, Turkey.*
[2]*Liv Bona Dea Hospital, Department of Hematology, Baku, Azerbaijan*

OBJECTIVE

This case report aims to present the successful treatment of a relapsed/refractory (R/R) myelodysplastic neoplasms (MDN) patient who was ineligible for allogeneic stem cell transplantation. We explore the use of azacitidine in combination with venetoclax as a potential therapeutic approach for MDN patients undergoing hemodialysis.

CASE

A 48-year-old female patient with symptomatic anemia refractory to erythropoietin stimulating agents (ESAs) presented to our hematology clinic. Initial laboratory findings indicated normocytic normochromic anemia and mild thrombocytopenia. Bone marrow biopsy confirmed MDN with excess blasts (EB-1) accounting for 6–7% of cells. After 6 cycles of standard dose azacitidine, bone marrow biopsy revealed MDS-EB-1 with 7–8% blast cells. Second-line treatment with decitabine was initiated but transfusion dependency worsened. As a third-line therapy, the patient received azacitidine in combination with venetoclax for 6 cycles. Venetoclax dose was adjusted due to persistent transfusion dependency, and after the third cycle, the patient no longer required red blood cell transfusions. No tumor lysis syndrome was detected during treatment. After the sixth cycle, bone marrow biopsy showed less than 1% blast cells and reduction of dysplastic changes.

CONCLUSIONS

High-risk MDN patients have limited treatment options, and allogeneic stem cell transplantation is often not feasible. BCL-2 inhibitors, such as venetoclax, have shown promising results in high-risk MDN patients. In this case, the combination of azacitidine and venetoclax proved to be effective without observed side effects, including tumor lysis syndrome. Our report highlights the potential use of this combination therapy for MDN patients undergoing maintenance hemodialysis who are ineligible for transplantation, providing a novel therapeutic approach for this specific patient population. Further studies are needed to evaluate the efficacy and safety of this treatment strategy in a larger cohort.

Date	Current status	Wbc	Neutrophil	Hemoglobin	Platelet	Tx Dependent
04/2020	Diagnose	8390	6480	6,1	91000	Yes
10/2020	After Aza x6	5400	2470	7,7	119000	yes
02/2021	After Decitabine x 4	5400	4020	7,7	182000	Yes
08/21	Aza+ ven x6	6100	3250	9,1	127000	no

Table 1: Brief table for treatment and resppnse assessment Schedule. Aza: azacytidine, ven: venetoclax, WBC: white blood cell, Tx: transfusion

REFERENCES

1. Ball BJ, Famulare CA, Stein EM, Tallman MS, Derkach A, Roshal M ,et al; Venetoclax and hypomethylating agents (HMAs) induce high response rates in MDS, including patients after HMA therapy failure. *Blood Adv* 2020; 4 (13): 2866–2870. doi: https://doi.org/10.1182/bloodadvances.2020001482
2. Ayari H, Pasquier F, El Karoui K, et al. Myelodysplastic Syndrome in Hemodialysis Patients. *Kidney Int Rep*. 2019;4(8):1175-1178. Published 2019 May 18. doi:10.1016/j.ekir.2019.05.002

ACKNOWLEDGEMENTS

I would like to show my thanks to my mentors who promote me for preparing this paper.

No conflict of interest has been declared by the presenters

CONTACT INFORMATION

Bahar Sevgili MD, Faculty of Medicine, Department of Hematology, Ege University, Izmir, Turkey.

E-mail: baharengin90@yahoo.com