Research Article

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Mantle Cell Lymphoma with Relapse: A Case Report and Literature Review.

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INTRODUCTION

Mantle Cell Lymphoma, or MCL; RRVD stands for Rituximab, Revlimid, Velcade, and Dexamethasone; VBR stands for Rituximab, Bendamustine, and Velcade; CHOP: Vincristine, Hydroxydaunorubicin, Cyclophosphamide, and PrednisoneMature B cell lymphomas are the ones that include the classical type of Mantle cell lymphoma (MCL). It is comparatively rare, accounting for 7-8% of cases of NHL (non-Hodgkins lymphoma). The majority of patients present with advanced cases, having a median age of 68 years at presentation [1]. The hallmark of MCL is the presence of translocation (11; 14) (q13; q32), which results in Cyclin D1 expression that is dysregulated.

The patient's age and level of fitness determine the course of the first therapy. Usually, rituximab-based chemo-immunotherapy is used first, and if clinically appropriate, auto HSCT comes next. Recently, the median survival increased from three years to five to seven years [2, 3].

CASE PRESENTATION

On December 11, 2008, a lung biopsy revealed the presence of pulmonary tuberculosis in a 63-year-old patient. He began using anti-tuberculosis (ATT) drugs and completed a full year of ATT treatment. In November 2010, during a follow-up visit at the pulmonary clinic, it was discovered that he had left submandibular lymphemia. ENT was recommended for him. At first, his FNAC revealed unusual cells. On 2/1/2011, he underwent an excisional biopsy. The results of the biopsy were MCL.

In February 2011, the patient was sent to the hematology/oncology service. He underwent a heart function examination, bone marrow biopsy, and staging work-up. With a MIPI score of 7.4 (high risk disease), he was classified as stage IIIA. He had CHOPR treatment when it was decided he wasn't fit for the high CVAD procedure.He was treated with CHOPR for six cycles with intrathecal prophylaxis when it was determined that he was not suited for the high CVAD regimen. He had repeated admissions for neutropenic fever due to his poor treatment tolerance. June 2011 marked the end of his six chemotherapy rounds. Following four cycles, a CT scan revealed partial response (PR).When it was found that he was not a good candidate for the high CVAD regimen, he had intrathecal prophylaxis along with six cycles of CHOPR treatment. As a result of his poor treatment tolerance, he was repeatedly admitted with neutropenic fever. He finished his six rounds of chemotherapy in June 2011. A partial response (PR) was observed after four cycles, with a mixed response and notable development of LNs in the mediastinum, according to a CT scan.He was moved on Rituximab, Lenalidomide, Velcade, and Dexamethasone (3rd line therapy) (RRVD).

On March 25, 2012, he began cycle 1 following his recovery from an infectious ailment. After two cycles, a CT scan revealed PR. The patient's treatment for febrile neutropenia was stopped. He was kept going on cycle five in August of 2012. had isolated advancement in the cervical LN of the right 8/12. External beam radiation therapy was recommended for him. He began on September 21, 2012, and completed his 36 GY in 18 Fractions on April 10, 2012. On December 18, 2012, he completed 10 cycles after restarting RRVD. Following that, he began a maintenance regimen consisting of lenalidomide and retinoids. He fared well up until September 2013, at which point his illness started to deteriorate. After that, he underwent an additional round of external beam radiation treatment for the dysphagia-causing mediastinal lymph nodes. After that, palliative care was recommended, and he passed away in August of 2014.

DISCUSSION

For patients with MCL that has relapsed or is resistant, there is no set standard of management. For patients who demonstrate good performance, salvage therapy utilizing aggressive regimens such as R-ICE, RDHAP, or R-ESHAP may be appropriate. standing. Cytarabine's efficacy in MCL has been shown repeatedly, suggesting that regimens like DHAP would be more beneficial.

Generally gentle therapies are used to treat patients who are older or not in good physical condition. The use of new drugs in second, third, and fourth line therapy [4] is responsible

for the improvement in survival. Treatment possibilities include IMids (Thalidomide, Lenalidomide) [8], Temsirolimus (mTOR inhibitor) [9], or Bendamustine [10]. Purine analogues [5-7] (Fludarabine, Cladribine) can be used alone or in combination. The FDA has approved Ibrutinib (a BTK inhibitor) and Bortezomib (Velcade) [11,12] for the treatment of relapsed MCL.

Despite his youth, our patient's performance condition was subpar. In addition, his high-risk illness rapidly worsened once the induction treatment was completed. The first salvage was attempted using VBR [12], but the outcome wasn't ideal. At that point, the only available treatments were Temsirolimus, IDs (Thalidomide, Lenalidomide), or purine analogs (Fludarabine, Cladribine), either alone or in combination. Clinical studies, particularly those utilizing Ibrutinib (a BTK inhibitor), are not accessible to patients. We hypothesised that since Velcade and Revlimid are both active in relapsed settings, they ought to be in this context as well.

An established treatment plan with a documented hazard profile for multiple myeloma is RVd. Our patient continued to get prophylaxis with Acyclovir and Sulfamethoxazole/ Trimethorpim as prescribed. Our patient was effectively Our patient received and was kept on prophylactic treatment with Acyclovir and Sulfamethoxazole/Trimethorpim as prescribed. After effectively enduring ten rounds of RRDIVD, our patient was started on maintenance treatment with lenalidomide and rituximab to keep the illness under control. He was able to go for ten months without experiencing any progression.

Although our experience is restricted to a single patient, the outcome was positive and the side effects were manageable. The delivery of boratezamib was subcutaneous. Neuropathy only affected those in grade 1. Throughout the duration of the course of action. We anticipate that this regimen can be tested on a larger cohort in order to more accurately determine the usefulness of this combination.

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