Satisfactory response after rituximab-bendamustin in poor performance status geriatric with relapsed DLBCL

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Case Presentation

- Diffuse large B-cell lymphoma (DLBCL) is the most common non-Hodgkin lymphoma (NHL), and it mainly affects elderly people; almost 50% of the patients are older than 65 years and 15% are older than 80 years.[1]
- Approximately 30% to 40% of DLCBC patients who achieve a complete response after first line treatment will experience a relapse during first two years.[2]
- A phase II study demonstrated rituximab-bendamustin to have promising efficacy and acceptable toxicity in geriatrics with DLBCL.[3]
- DLBCL is chemotherapeutic sensitive, on the other hand, the toxicity of treatment can worsen the geriatric patient's condition

Case Presentation

- A 67-year-old woman, with a DLBCL (diffuse large B-cell lymphoma) who had a complete response six years ago after RCHOP, came to the hospital because of a 5 cm lump in the right groin, right leg swelling and 13 kg weight loss within a month.
- Lymphadenectomy was done on right groin lump, and pathology examination revealed a relapse of DLBCL.
- Abdominal MSCT with contrast showed multiple nodal metastases of the liver and spleen (Fig 1).
- Her initial ECOG performance status was 4
- A DVL revealed in the right femoral vein
- Baseline laboratory results : hemoglobin 12.1 g/dL, leucocytes 2.4x103/µL, platelets 60x103/µL, and neutrophil count 1300/µL.
- The patient prefer chemotherapy over general palliation
- RB regiment consist of rituximab 375 mg/m2 on day 1, bendamustine 100 mg/m2 on day 1, and 50 mg/m2 on day 2.
- For her DVT, fondaparinux 7.5 mg/24 hours was planned for later following an improvement in platelet counts.
- After the first cycle, she experienced febrile neutropenia with pneumonia and post-lymphadenectomy abscess.
- Filgrastim injection of 300 µg twice a day and meropenem 1 g three times a day.
- On the 12th day after the first cycle RB, she experienced dyspnea, peripheral edema, crepitus at the lung bases, and pulmonary edema found on her chest x-ray evaluation. The patient was treated with drip furosemide of 10 mg/hour and fondaparinux treatment was initiated.
- On the 13th day, she had melena, a drop in platelets to 53x103/µL and hemoglobin to 7.5 g/dL.
- She was given an apheresis platelet and packed red cells transfusion.
- On the 20th day, she was discharged with ECOG 2.
- The second and later cycle of chemotherapy was given 28 days after the previous cycle (rituximab 375 mg/m2, bendamustine 50 mg/m2 on day one and two).
- MSCT Abdomen contrast evaluation after 4 cycles of RB : the lesions in the liver were reduced by 52% and the nodules in the spleen were reduced by 38% (Fig 2).

Discussion

- Systemic anti-cancer therapy may be used for geriatric patients with weak PS and tumors that are extremely chemosensitive.[4]
- Reducing the dose of chemotherapy is a strategy that can be done in less fit DLBCL.[5]
- Probowati in 2021 also reported the use of RB in a geriatric with relapse DLBCL giving a good response.[6]

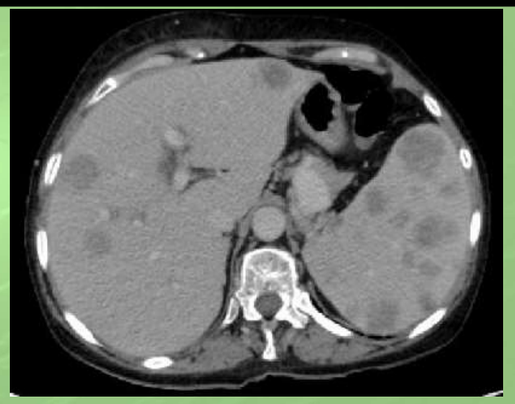

Fig 1 Abdominal MSCT before rituximab-bendamustin

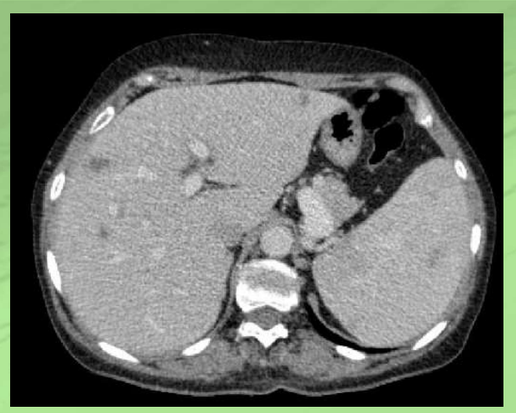

Fig 2 Abdominal MSCT after 4 cycles of rituximab-bendamustin

Coclusions

- Chemotherapy may be considered in geriatric with poor performance status if the cancer is chemotherapy sensitive.
- This case showed that the RB regimen effectively responded to relapsed DLBCL as a second-line and relatively safe if provided with supportive treatment.
- Chemotherapy doses can be reduced to manage toxicity in less fit DLBCL.

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