

Plasma cell leukemia

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Context

PCL it is a rare entity and very aggressive disease. The diagnosis is based on presence of PCL in peripheral blood more than 20% or an absolute plasma cells count more than 20×10^9 . It is classified as primary PCL when it is occurred in patient with no previous history of MM. And as a secondary PCL when it is observed as leukemic transformation of relapsed or refractory recognized MM.

KEY WORDS: Plasma cell leukemia (PCL), lymphocytes (CLL,HCL), Lymphomas (marginal zone lymphoma), VTD-PACE

Methods

CASE REPORT: A 34 years old female, was accepted in clinic in 2019. She has Spleen:161mm; Liver:148mm. High level of beta2M and LDH. More than 30% of plasma cells in peripheral blood. Severe anaemia, leucocytosis and thrombocytopenia. Flowcytometri shows clonality for plasma cells.

Results

We treated our patient with VTD-PACE regimen (a combination of bordezomib 1mg/m² ,s.c, D1,D5,D8,D11,,dexamethason 40mg D1-D4 I.v.,thalidomide 200mg/d,D7-D28,p.o.,cisplatin 10mg/m² D1-D4,i.v., adriamycin 10 mg/m² D1-D4 ,i. v. cyclophosphamide 400 mg/m² D1-D4 and etoposide 40 mg/m² D1-D4,i.v.), We propose her to go under the HSCT and she went abroad because this procedure can not be performed in our country yet.

Conclusions

PCL is a rare entity,very aggressive with poor prognosis. Early diagnosis and early treatment are very important prognostic factors. Treatment with imunomodulatory drugs such as Bordesomib-based regimen, followed by stem cell transplantation is recommended.

References

1. Harousseau JL,Atal M,Avet-Loiseau H,Marit G,Calliot D,Mohy M et al.Bordezomib plus dexamethasone is superior to vincristine plus doxorubicin plus dexamethasone as induction treatment prior to autologous stem-cell transplantation in newly diagnosed multiple myeloma:results of the IFM 2005-01 phase III trial,J Clin Oncol 2010;28:4621-4629.
2. Reeder CB,Reece DE,Kukreti V,Chen C,Trudel S,Hentz J et al.Cyclophosphamide,bordezomib and dexamethasone induction for newly diagnosed multiple myeloma:high response rates in phase II clinical trial.Leukemia 2009;23:1337-1341
3. Kumar SK,Dispenzieri A,Lacy MQ,et al. Continued improvement in survival in multiple myeloma;changes in early mortality and outcomes in older patients.Leukemia. 2013;28(5):1122-1128.