and reliable diagnosis of MPN. Few lines can be included regarding the need of further studies with larger cohort from multi centers Use of high throughput sequencing techniques for identifying mutations located anywhere else in these genes Shouldn't it be 4?

https://doi.org/10.1016/j.htct.2025.103901

PP 24_Case report

A CASE OF THROMBOCYTOSIS AND HEMOTHORAX IN A PATIENT WITH ITP FOLLOWING ROMIPLOSTIM USE

Ali Turunç, Birol Güvenç

Çukurova University, Turkey

Introduction: Immune Thrombocytopenia (ITP) is an autoimmune disease characterized by isolated thrombocytopenia and normal to large platelets in the peripheral blood smear. It is an autoimmune disorder that leads to peripheral platelet destruction and decreased platelet production. Romiplostim, a peptide-antibody fusion product, is a thrombopoietin receptor agonist indicated for use in patients with ITP. Romiplostim is indicated for patients with ITP who have had an inadequate response to first-line therapy. Side effects of the drug include increased bone marrow reticulin, reversal of severe thrombocytopenia, thrombocytosis and increased immunoblast proliferation. In this case report, we present a patient with ITP refractory to first-line therapies who was admitted to the intensive care unit for thrombocytosis and haemothorax after a single dose of Romiplostim. **Case:** A 34-year-old female patient, who had been followed in the hematology clinic for ITP for approximately 5-years, was admitted to the clinic because of deep thrombocytopenia and deep anaemia due to menometrorrhagia. On admission, the platelet count was 2000 ($10^3/\mu L$) and the hemoglobin level was 5.4 g/dL, and she was taking eltrombopag 75 mg at the time of admission. He was tachycardic and hypotensive and was given erythrocyte suspension. Clinical and radiological examination revealed no bleeding foci other than menstrual and oral mucosal bleeding. The patient was treated with steroids, IVIG and rituximab during the follow-up period in the clinic. Despite the treatments given, bleeding control could not be achieved and a single dose of 2 mcg/kg Romiplostim was administered to the patient in the 2^{nd} week of hospitalization. The patient's platelet count began to rise rapidly on the 3^{rd} day after treatment and was measured at 1,650,000 ($10^3/\mu L$) on the 5^{th} day. At the same time, the patient developed dyspnea and a chest scan was performed, which revealed a hemothorax. The patient was admitted to intensive care. Drainage was performed with a chest tube. Acquired von Willebrand Factor (vWF) deficiency due to thrombocytosis was considered as the cause of the hemorrhage. The vWF level in the blood was found to be low. The thrombocytosis was controlled by platelet apheresis. After clinical improvement, platelet levels were normalized, and the patient was discharged. **Conclusion:** Romiplostim is a generally well tolerated agent. Current evidence suggests that it increases platelet counts, reduces bleeding, reduces the need for rescue therapy, reduces the amount of corticosteroids required, improves quality of life and, in isolated cases, is associated with remission of ITP. However, it should be used with caution as serious side effects include increased bone marrow reticulin, reversal of severe thrombocytopenia, thrombocytosis and increased immunoblastic proliferation

https://doi.org/10.1016/j.htct.2025.103902

Adult Hematology Abstract Categories

Multiple Myeloma

PP 25_Case report

IMPACT OF LENALIDOMIDE MAINTENANCE DOSAGE ON SURVIVAL OUTCOMES IN MULTIPLE MYELOMA

Zeynep Kürüm, Ayfer Gedük

Kocaeli University Medical Faculty, Turkey

Objective: This study aimed to assess the impact of lenalidomide maintenance dosing on clinical outcomes and the development of lenalidomide refractoriness in Multiple Myeloma (MM) patients who received maintenance therapy following Autologous Stem Cell Transplantation (ASCT) at our institution. **Methodology:** A retrospective analysis was conducted on 82 MM patients who underwent lenalidomide maintenance therapy on a 21/28-day cycle post-ASCT. Low-dose maintenance was defined as a dose below the maximum allowable level, determined by the patient's Glomerular Filtration Rate (GFR) and hematologic parameters at initiation. The Maximum Tolerable Dose (MTD) was defined as the highest dose a patient could tolerate based on these criteria. **Results:** In the overall cohort, median PFS was 56.0-months (95% CI: 40.15–71.85) and median OS was not reached. However, 88.3% of patients were alive at 60-months and 68.2% at 120-months. A response of ≥ VGPR was observed in 91% of patients receiving low-dose maintenance therapy, compared to 73.3% in those receiving treatment at the maximum tolerated dose ($p = 0.005$). While the median PFS was 56.0-months (95% CI 47.06–64.93) in those receiving low-dose maintenance; the median PFS was 33-months (95% CI 23.36–42.63) in those receiving maintenance at the MTD ($p = 0.166$). Dose reductions during maintenance therapy due to adverse effects were reported in 17 patients (20.7%). Of these, 11 patients (16.9%) were initially on low-dose maintenance, while 6 patients (40%) were on the MTD ($p = 0.42$). The median duration of maintenance therapy was 21 months (6–34) for patients on low-dose maintenance and 11 months (4–24) for those on the MTD ($p = 0.114$). Second-line treatment was administered to 40 patients (48.7%) who experienced progression. The median PFS2 was 25.36-months (95% CI 9.24–41.48), and the median OS2 was 73.23-months (95% CI 42.50–103.95). Median PFS2 was 25.43-months (95% CI 0.20–50.66) and the survival rate was 70% at 60-months in those receiving lenalidomide-based second line therapy, while median PFS2 was 25.36-months (95% CI 6.30–44.42) and the survival rate was 53.8% at 60-months in those receiving lenalidomide free

therapy (p = 0.978, p = 0.902 respectively). Following low-dose maintenance therapy, the median PFS2 was 26.167-months (95% CI 5.571–46.762) in the lenalidomide free therapy group and 25.433-months (95% CI 0.08–50.787) in the lenalidomide-based second line therapy group (p = 0.581). Although median OS2 could not be calculated, at 60-months, the survival rate was 74.5% in patients receiving lenalidomide-based treatment, while it was 62.3% in patients receiving treatment without lenalidomide (p = 0.637). **Conclusion:** This study introduces the concept of low dose versus MTD lenalidomide maintenance. MTD does not confer a survival benefit and is associated with increased toxicity. Our findings support low-dose maintenance as a preferable approach, although lenalidomide refractoriness remains a concern.

https://doi.org/10.1016/j.htct.2025.103903

PP 26_Case report

ASSESSMENT OF INTERPHASE FLUORESCENCE IN SITU HYBRIDIZATION (FISH) TEST IN A PATIENT WITH MULTIPLE MYELOMA: EXPERIENCE OF OUR MEDICAL GENETICS DEPARTMENT

Fatma Turki [a], Imen Rezgui [a], Faten Kallel [b], Moez Mdhaffer [b], Hassen Kamoun [a], Rim Frikha [a,c]

[a] *Hedi Chaker Hospital, Tunisia*
[b] *Medical Genetic Department, Tunisia*
[c] *Clinical Hematology Department, Tunisia*

Objective: Multiple Myeloma (MM) is an orphan disorder of end stage plasma cells with acquired genetic abnormalities of clinical importance not captured by conventional cytogenetic analysis because of the low proliferation of malignant plasma cells. Thus, interphase Fluorescence In Situ Hybridization (FISH), performed on sorted plasma cells detected abnormalities independently of a proliferative and infiltrative index. The purpose of this study was to explore, for the first time in our Medical Genetics department the molecular genetics features in a Tunisian patient with multiple myeloma. A 35-year-old Tunisian man, followed-up for MM since two years and received VTD chemotherapy protocol (bortézomib, thalidomide et dexaméthasone). Actually, as part of evaluation of his disease, and in the presence of infectious syndrome, the MM's relapse is suspected. Magnetic cell separation of PCs was performed using the Whole Blood CD138 MicroBeads, Whole Blood Column Kit, and the QuadroMACS Separation Unit (Miltenyi Biotec) according to the manufacturer's protocol. Slides were pretreated according to the manufacture's protocol. The FISH probes used in this study included IGH/FGFR3(4p16/ 14q32; DC.DF)/vysis, TP53/CEP 17(17p11.1-q11.1/17p13.1) FISH probe, Vysis. **Results:** Revealed the presence of three signals of IGH in 75% of nuclei and one signal of TP53 in 96% of nuclei. These results demonstrated the deletion of the short arm of chromosome 17 (del(17p)) and the absence of t(4;14). However, the presence of three signals of IGH indicated either the IGH amplification or the IGH rearrangement involving other partner chromosomes. These results were consistent with patient's relapse. The t(4;14) and del (17p) are high-risk markers associated with adverse prognosis. Patients with these genomic aberrations should be treated with targeted therapy. The detection of the 1q21 'gain could be considered in further studies because it is the most frequent structural abnormality, observed in 35% –40% of the patients with MM which is an independent poor prognostic factor.

https://doi.org/10.1016/j.htct.2025.103904

PP 27_ Case report

TREATMENT MANAGEMENT IN MULTIPLE MYELOMA WITH RENAL DISORDER

Meryem Sener

Düzce Atatürk State Hospital, Duzce, Turkey

Introduction: Multiple Myeloma (MM) is a plasma cell neoplasm characterized by the accumulation of monoclonal plasma cells in the bone marrow, leading to osteolytic lesions, anemia, infections, hypercalcemia, and kidney impairment. This review focuses on managing kidney disease in MM, particularly light chain cast nephropathy. **Case:** A 66-year-old male with progressive fatigue, dizziness, weight loss, and recurrent pneumonia was referred for anemia evaluation on 28.11.2024. Laboratory results showed:

- Hemoglobin: 5.4 g/dL, Hematocrit: 18.3%, Platelets: 56×10^3/uL
- Creatinine: 1.39 mg/dL, Calcium: 9.7 mg/dL, Total Protein: 9 g/L, Albumin: 2.9 g/L
- IgA: 4295 mg/dL, IgG: 141 mg/dL, IgM: < 5 mg/dL

Peripheral smear showed rouleaux formation, and protein electrophoresis revealed a gamma peak. Immunofixation detected IgA-lambda bands, with bone marrow biopsy confirming 70% plasma cell infiltration. The patient was started on VCD chemotherapy (bortezomib, cyclophosphamide, dexamethasone). Neutropenia worsened, requiring G-CSF support. Renal function improved, and zoledronic acid was given for widespread lytic lesions. Due to Febrile Neutropenia (FEN), treatment was switched to VRD (bortezomib, lenalidomide, dexamethasone). After four cycles, symptoms improved, and cytopenia's resolved. Although serum immunofixation remained positive, the patient achieved a Very Good Partial Response (VGPR). A follow-up bone marrow biopsy is planned after four more cycles, with Autologous Stem Cell Transplant (ASCT) scheduled if the response continues. **Conclusion:** Managing MM with renal impairment requires balancing efficacy and toxicity. A four-drug regimen (Dara-CyBorD or Isa-CyBorD) is preferred in fit patients with severe AKI, while a three-drug regimen (Dara-Vd) is recommended for frail patients. If daratumumab or isatuximab is unavailable, CyBorD is an alternative. Bortezomib, daratumumab, and isatuximab can be safely used in kidney dysfunction without dose adjustments. Lenalidomide is avoided in AKI unless refractory. In this case, VCD was chosen initially, and after renal improvement, VRD