

Association of Northern California Oncologists

HEMATOLOGICAL MALIGNANCIES UPDATE: ACUTE & CHRONIC LEUKEMIAS, & MYELOMA

Case Studies

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September 17, 2016

Case 1

- 63 yo man with PMH including Prostate Ca s/p prostatectomy in 2011 and Hyperlipidemia presents with syncope and found to have a WBC of 120 with 60% blasts.
- Bone Marrow Biopsy completed showing a hypercellular marrow (90% cellularity) with 90% abnormal blasts consistent with AML with monocytic features
 - Normal cytogenetics and normal FISH
 - Molecular Testing revealed NPM1 positivity along with FLT3-ITD positivity (TKD negative)

Case 1

- Beyond Leukopheresis, initial treatment in the setting of normal cytogenetics with FLT3-ITD mutation?
 - Patient was induced with 7+3
 - Following induction, patient's counts recovered and BMBx confirmed CR1; FLT3-ITD and NPM1c mutations were negative
 - Underwent three cycles of Cytarabine-based Consolidation
- Role of allo-HCT in CR1 with FLT3-ITD?
 - Patient's brother was found to be a 10/10 HLA match and patient underwent reduced intensity allo-HCT

Case 1

- Role for FLT3 inhibitors in the post-transplant setting?
- Patient underwent routine BMBx 3 months after transplant
 - No evidence of disease per BMBx review, however FLT3-ITD detected
 - Next BMBx revealed frank relapse
- Thoughts on next steps?
 - Patient was enrolled on a clinical trial of "standard" salvage induction versus FLT3-inhibitor; randomized to salvage induction with FLAG-Ida
 - Underwent DLI after salvage induction
 - Most recent BMBx showing no evidence of disease and FLT3-ITD negative

Case 1

- Discussion
 - Thoughts on initial induction (+/- FLT3 mutation)
 - Use of allo-HCT with FLT3 mutation in CR1
 - Timing and use of FLT3 TKI
 - Use of FLT3 mutation to detect MRD
 - Distinction between FLT3-ITD and FLT3-TKD

Case 2

- 60 year old male with PMH including L Nephrectomy due to congenital abnormality, Anti-phospholipid Syndrome on Warfarin who presents to clinic with Monoclonal Gammopathy and Proteinuria
 - Found after completing 24h urine collection for concern of being exposed to a certain toxin in the military (40 years ago)
 - SPEP showing 2.5 mg/dL M-protein = IgG Kappa
 - UPEP showing Kappa Light Chains
- Overall, patient feels well with no complaints
 - Further labs reveal Hgb 13.2, WBC 3.3, Cr 0.89, Ca 8.6
 - Bone Survey unrevealing

Case 2

- No evidence of end-organ damage per CRAB Criteria
- Bone Marrow Biopsy completed
 - 60% plasma cells found in the setting of a hypocellular marrow
 - FISH normal
- Serum Free Light Chains
 - Kappa 1700 mg/L : Lambda 6 mg/L
 - $\kappa/\lambda = 280$

Case 2

- Indication to treat?
 - Per revised IMWG criteria, patient met 60% or greater clonal plasma cells on bone marrow examination and serum involved/uninvolved free light chain ratio of 100 or greater
- Patient started treatment with CyBorD
 - Achieved PR per IMWG
 - Also began auto-HCT evaluation

Case 2

- Due to a plateau in response, a change in treatment was considered
 - Thoughts for next steps in therapy?
 - Patient started on RVd; after 3 cycles of RVd, VGPR achieved (serum M protein with at least 90 percent reduction)
 - Patient prepared for auto-HCT
- Role of auto-HCT in Multiple Myeloma?
 - Patient underwent Auto-HCT
- Role of Lenalidomide maintenance?
 - Patient to start Lenalidomide on D+90

Case 2

- Discussion
 - Revised IMWG Guidelines
 - 10% Bone Marrow Plasma Cell involvement + CRAB criteria OR
 - 60% Bone Marrow Plasma Cell involvement OR
 - Serum involved/uninvolved free light chain ratio of 100 or greater OR
 - More than one focal lesion on MRI that is at least 5mm or greater in size
 - Standard initial therapy
 - IMWG response Guidelines
 - Role of auto-HCT
 - Role of Lenalidomide Maintenance

Case 3

- 73 yo woman with PMH including IPSS Int-1 MDS with monosomy 7 and Hypertension, who presents to clinic with secondary AML
 - No previous treatment for MDS
 - BMBx completed showing 80-90% cellularity and 65% blasts by morphology
 - Cytogenetics = 46,XX,t(2;7)(q33;q22)?c[20]
 - Core binding factors, MLL, FLT3 and NPM1 negative
- In all, patient feels well barring fatigue and DOE
 - Performance Status = 1

Case 3

- Initial thoughts in therapy?
 - Induction versus Hypomethylating Agent versus Best Supportive Care
 - Factors that may influence choice
 - Age
 - Secondary AML
 - Performance Status
 - Use of AML-Score
 - Chance of CR = 37% with chance of early death = 27%
- Patient started on clinical trial with HMA and Bcl2 inhibitor
 - Admitted due to risk of TLS amplified by Bcl2 inhibitor

Case 3

- BMBx completed after Cycle 1
 - No evidence of disease by morphology or flow
 - Plt >100, however ANC <1000
 - CRi achieved with persistent cytogenetic changes
- Patient completed 4 cycles of HMA/Bcl2 inhibitor
 - BMBx shows no evidence of disease by morphology or flow
 - Counts recovered, consistent with continued CR
 - Cytogenetics still abnormal

Case 3

- Consideration of allo-HCT?
 - Patient evaluated but considered high risk due to comorbidities
- Next steps in therapy (or non-therapy)?
 - Patient currently continuing on indefinite cycles of HMA/Bcl2 inhibitor

Case 3

- Discussion
 - Treatment discussion in AML for:
 - Elderly
 - Secondary AML
 - Use of AML-score
 - Role of Clinical Trial in elderly AML
 - Role of allo-HCT
 - Role of Hospice/Best Supportive Care

Case 4

- 83 yo man with PMH including IgG Kappa Multiple Myeloma, HTN, DM Type II, among many others, who presents for further care of Multiple Myeloma
 - Diagnosed after presenting to PCP with increasing R Hip Pain
 - Previously treated at another facility
 - Initial M-protein 3.3 g/dL; Kappa SFLC 2430
 - Started on Bortezomib/Dexamethasone; completed 2 cycles of Vd
 - Stopped due to neuropathy and diarrhea
- Thoughts on initial therapy?

Case 4

- Started on Lenalidomide/Dexamethasone
 - Decrease in M-protein and SFLC noted
 - Lenalidomide then held due to progressive anemia
- Next steps in therapy?
 - Patient restarted on Lenalidomide/Dexamethasone at reduced dose
 - 50% reduction in Kappa SFLC and M-protein
 - Patient tolerating without significant side effects

Case 4

- Role of auto-HCT in this case?
 - Monitoring and therapy in transplant ineligible patients
- If progression seen, thoughts of next steps in therapy?
 - Carfilzomib?
 - Daratumumab?
 - Combination?

Case 4

- Discussion
 - Multiple Myeloma treatment in transplant-ineligible patients
 - Next steps if transplant not an option

Questions/Thoughts