Indy Hematology Review 2020 Townhall: Case Presentation

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ASYMPTOMATIC MYELOMA

- 55 year old presents with an elevated total protein during routine evaluation; Total protein 8.5, albumin 3.5, normal calcium and creatinine.
- CBC: Hg 13.2, B2M 1.5
- SPEIP: IgG kappa monoclonal gammopathy, M-protein 2.59g/dl, IgG 3116, K:L 9.88
- BM biopsy: 10-15% Plasmacytocytosis
- Skeletal survey: Negative

Smoldering myeloma

- 48year of female presents in October 2010 with: M-Protein of 1.5 g/dl, IgG of 2102 mg/dl, IgM of 53 mg/dl, and IgA of 43 mg/dl.
- BM biopsy:10% kappa restricted plasma cells with normal cytogenetics and
- Myeloma FISH: Negative ch 5, 9, 11, 13, and 14q32, in addition to 15 and 17
- August 2014 PET/CT scan and MRI negative, Hg: 14.6, PLT 269, Creat 0.9, calcium 9.8Hg:14.6,PLT 269, beta-2 microglobulin of 2.1, IgG1889, KLC 1889, sFLC ratio1.69. Cytogenetics were normal, except for del 1p.
- 2020: Normal CBC, creat, sFLC ratio, MRI
- Seeks Second Opinion @ Dana-Farber

R/R High Risk Myeloma

- 66 year old diagnosed with MGUS in December 2013, lost to follow-up.
- October 2018: Hg 7.9, IgG 3630, FLC 557, K:L ratio: 0.22, M-protein 1.8g/dl, B2M 5.5, creatinine 2.31
- BM biopsy: 80-90% plasmacytosis, Cytogenetics: Del 1p, and 13q with IGH/MAF rearrangement.
- Initial Therapy: RVD x 4 with PR, then Dara-KRD, with progressive disease after 4 cycles.
- Repeat cytogenetics: deletion of 1p, duplication of 1q, deletions 3q and 17p, in addition to an IgH gene rearrangement.

Stage II DLBC NHL

- 64 year presents with cervical adenopathy: No B symptoms.
- Core needle biopsy: “malignant cells favoring large cell lymphoma, positive for CD19/CD20 with kappa restricted immunophenotype, indicative of a B-cell lymphoma of germinal center origin”
- PET CT scan: Cervical and carotid adenopathy without evidence of disseminated disease or bulky disease
- Excisional biopsy: DLBC-NHL
- BM biopsy: Negative

AL AMYLOIDOSIS WITH CARDIOMYOPATHY

- 67 yo man presents to cardiology for CHF, EF 41%, restrictive cardiomyopathy;
- PMH: Atrial flutter history, ICD/pacemaker.
- Cardiac MRI: Suspicious for amyloid, BNP 1290, troponin 0.110,
- SPEIP: lambda light chains: 291 (K:L ratio 0.085)
- BM biopsy: 5-8 % lambda restricted plasmacytosis, Congo red negative.
- BM Cytogenetics: CCDN1/IGH rearrangement detected
- Fat pad biopsy: positive for AL amyloid.
- ECOG 0.

CLINICAL CASE FROM Dr. Ashwin Vasudavemurthy

62 YEAR OLD WITH IGVH MUTATED CLL

- 62 year old presents with lymphocytosis/leukocytosis.
- INITIAL CBC: 25K, Hg 12.6, 215
- PB flow cytometry: 84% B cells, CD19+, CD20 dim+, and CD5/CD23+ with negative ZAP70 and CD38 neg.
- FISH/MOLECULAR: 13q deleted, mutated IGVH
- CURRENT CBC (2.5 years later): WBC 215K, Hg 11, plts 180,
- CLINICAL STATUS: ECOG 1, increasing fatigue

68 YEAR OLD WITH IGVH UNMUTATED CLL

- 68-year-old with a history of CD38 negative, ZAP-70 positive chronic lymphocytic leukemia with normal cytogenetics and normal FISH, diagnosed in May 2010, now being watched and waited.
- CURRENT STATUS: Progressive neutropenia and anemia.
- CLL FISH normal cytogenetics without evidence of deleterious mutations identified.
- MOLECULAR STUDIES: IGVH: Unmutated
- CBC: WBC 50.5, Hg 9.6, Plts 152, ANC 380

MPN IN BLAST CRISES

- 67-year-old female who presented with a platelet count of > 1million, and erythrocytosis, diagnosed with Essential Thrombocytosis in October2003.
- Initial therapy: Hydroxurea with occasional phlebotomies.
- September 2019: Progressive pancytopenia, hydroxyurea discontinued and anagrelide initiated.
- October 2019: Abdominal distention, dyspnea, night sweats, fatigue and a 10-pound unintentional weight loss.
- CBC: WBC 27.8, Hg 9.2, platelets 390K with 49% neutrophils, 26% banded neutrophils, and a left-shift with monocytes, eosinophils, basophils, metamyelocytes, and myelocytes.
- CT abdomen: MASSIVE SPLENOMEGALY
- BM BIOPSY: 20-30% CD34 positive myeloblasts with normal cytogenetics and negative mutational analysis.

Stage IVB Diffuse Large Cell NHL

- 66 year old presents with progressive fatigue, abdominal discomfort.
- ECOG PS: 3
- Lymph Node Biopsy: Germinal Center Diffuse Large cell NHL (CD20, bcl-2 and bcl-6 positive, C-myc, MUM-1, Cyclin D-1 negative.)
- CT Scan: Marked splenomegaly, with extensive bulky abdominal (>10cm) and pelvic adenopathy.
- BM biopsy: 80-90% marrow involvement by CD5-positive diffuse large B-cell NHL, with Ki-67 index 80-90%.
- LDH: 616 (94-250)
- PET/CT: Generalized PET-avid adenopathy
- IPI score: 5, CNS-IPI score: 4 (High Risk; 2 year risk of CNS progression 10.2%)

NEWLY DIAGNOSED STAGE IV ANGIOIMMUNOBLASTIC LYMPHOMA

- 61 year old presents with progressive fatigue with neck and axillary adenopathy, increased coughing, and night sweats.
- PET/CT scan: Generalized adenopathy with chest and abdominal adenopathy and malignant pleural effusion.
- LN Biopsy: Angioimmunoblastic T-cell lymphoma, (CD3, CD4 and CD5 positive, CD8, CD7, CD20, PAX5, CD10, CD30 and BCL6 negative). CD30 positivity noted in several mixed reactive B immunoblasts.
- LABS: Uric acid 8.7, LDH 357 (ULN250), G6PD positive
- BM biopsy: Positive
- IPI: High risk (4/5)

Ph Positive Acute lymphoblastic leukemia

- 64year female presents with abnormal CBC: WBC 4.7, hg 7.8, PLTS 677
- Peripheral blood smear and peripheral blood flow cytometry: B-cell acute lymphoblastic leukemia CD45/CD34/CD19/CD38/CD10/HLA-DR positive, and CD20/CD22 negative. Peripheral blood FISH positive for BCR/ABL and t9;22 (Philadelphia chromosome).
- PMH: Morbid obesity, IDDM, COPD, Anxiety, Bipolar
- ECOG PS: 3

TRANSFORMED FOLLICULAR B-CELL NHL AFTER PRIOR ANTHRACYCLINE BASED CHEMOTHERAPY FOR STAGE II BREAST CA

- 66-year-old with PMH of Stage II invasive, triple negative ductal carcinoma diagnosed in 2005, status post neoadjuvant doxorubicin-based chemotherapy to 240mg/M2 in CR.
- 2010: Patient diagnosed with Follicular lymphoma.
- 2017: BR x 6, and Rituximab maintenance x 2 years for symptomatic progression achieving CR.
- 2019: Transformed Diffuse Large Cell NHL (CD20, BCL2 and BCL6 positive, MUM1 negative, with a Ki-67 index of 80-90% and Cyclin D1, c-myc, and EBV negative) – Stage I, with nasopharyngeal only disease, without detectable Follicular NHL.