MDS

CASE PRESENTATION

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Heme Fellow
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61 y.o. male with long-standing cytopenias since 2007, referred for worsening pancytopenia in the setting of traumatic jaw fracture & osteomyelitis.

Past Medical History:
- Severe schizophrenia, moderately controlled on Lamotrigine & Fluphenazine
- Hepatitis C infection (genotype 2a, VL 44k, LFTs mildly elevated)

Social History:
- Lives with mother who helps with his medications.
- Ongoing tobacco use (1 ppd).
Hematology initially consulted in 2010 for mild stable pancytopenia, with hemoglobins in 10-11 g/dL range, platelets in the 80k range, and ANC slightly downtrending to 700-800.

- Given stable disease, cytopenias were thought to be secondary to psychiatric medications + hepatitis C.

In 2011, patient incurred a traumatic jaw fracture requiring ORIF, complicated by coag - Staph/peptostreptococcus bacteremia and osteomyelitis.

- Cytopenias persisted after weeks of treatment and jaw debridement (and an AMA discharge)
- Eventually consented to a bone marrow, which was performed 1 month after the fracture.
1\textsuperscript{st} bone marrow lost in accessioning!

2\textsuperscript{nd} bone marrow (performed on the psych service):
- Normocellular marrow (40%)
- Megaloblastic changes of erythroid lineage, but no dysplasia in megakaryocytes or neutrophils
- Polyclonal plasma cell predominance (10-20%)
- \textit{Impression}: Non-specific findings, could be secondary to hepatitis C. Consider vitamin B12 deficiency. B12 level 529.

Other studies:
- Flow: Mixed population, slightly abnormal myeloid maturation, no increase in blasts.
- Cytogenetics: Lost (again!)
- FISH: \textit{7q deletion in 32.5\% of nuclei}, trisomy 8 in 2.0\%
QUESTIONS

- What do the bone marrow findings suggest about the etiology of his pancytopenia?
- What are his treatment options?
- What is his prognosis?
Lamotrigine was switched to Depakote for HDAC properties.

q1-2 week lab visits to establish compliance.

Recently required transfusion of 2 U PRBCs for symptomatic anemia with hemoglobin of 7.1g/dL and was initiated on Darbepoetin.

Scheduled for an initial consultation in Weinberg, but became paranoid about visit and didn’t attend visit despite urging of mother and hematologist.

Initial counts: WBC 1.9, ANC 180, Hemoglobin 9.9, Platelets 53.
Most recent counts: WBC 1.6, ANC 492, Hemoglobin 9.5 (s/p transfusion), Platelets 74.
Classification:

- 2010 ASH Education, Prognosis of Myelodysplastic Syndromes, Guillermo Garcia-Manero
- Revised International Prognostic Scoring System (IPSS-R) for myelodysplastic syndromes.

Mutations:


Monosomal Karyotype:

- Blood consult: monosomal karyotype acute myeloid leukemia., Garcia JS, Medeiros BC, Appelbaum

Co-morbidities:

- Co-morbidities and HCT Outcomes, ASH Education Book, 2010, p237