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VANTAGEPOINT LABORATORY PARTNERS

4980 Carroll Canyon Road
San Diego, CA 92121
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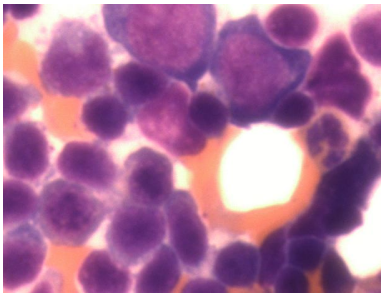
Patient Name:	Sample Patient	**Ordering Physician:**	
D.O.B. & Gender:	01/01/19xx (xx yrs.) - Female	**Ordering Facility:**	
Collection Date:	08/06/2014	**Referring Physician:**	
Received Date:	08/06/2014	**Account Number:**	
Report Date:	08/08/2014	**VantagePoint ID #:**	
Specimen Type:	Bone Marrow Core, Bone Marrow Slides	**VantagePoint Case #:**	
Specimen ID:		**Medical Record #:**	

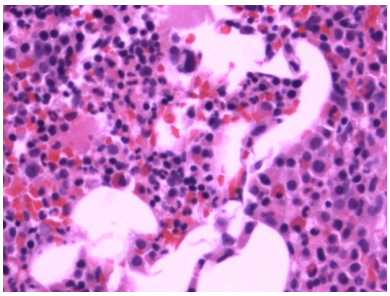
Hematopathology Report

Clinical Data:

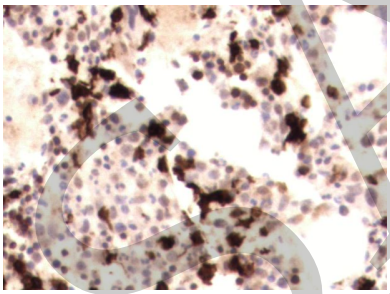
XX year old Male



Slight erythroid dysplasia. Also, lymphocytes are mostly small in size.



Increased marrow cellularity of 65%, with trilineal hyperplasia.



~10% CD8 positive T-cells/LGLs.

Final Diagnosis:

PERTINENT POSITIVE FINDINGS (PLEASE SEE COMMENT SECTION):
1) MILD ERYTHROID DYSPOIESIS
2) HYPERCELLULAR MARROW OF 65% WITH TRILINEAL HYPERCELLULARITY
3) 10% CD8 POSITIVE T-CELLS CONFIRMED BY MORPHOLOGY - SCATTERED

OTHER MARROW FINDINGS:
1) ADEQUATE IRON STORES (NEGATIVE FOR RINGED SIDEROBLASTS)
2) NEGATIVE FOR INCREASE IN BLASTS.

Comments:

In regards to the macrocytic anemia, the bone marrow does show erythroid dysplasia and trilineal hypercellularity. These findings are suggestive of a low-grade myelodsyplastic syndrome, if nutritional factors (B12/Folate) have been excluded.

In regards to the atypical T-cell large granular lymphocyte (LGL) population, detected by flow cytometry, there is an increase in LGLs by immunohistochemistry. However, these cells are scattered. Thus the findings are still inconclusive for a concurrent T-cell large granular lymphocytic leukemia. As mentioned in the flow cytometry report, World Health Organization classification requires the presence of persistent LGL lymphocytes for greater than 6 months for the definite diagnosis of T-cell large granular lymphocytic leukemia. Repeat peripheral blood flow cytometry in 6 months maybe helpful in further assessment, if clinically needed. T-cell gene re-arrangements will be reported separately.

Gross Description:

(Core-1) Received in formalin labeled with the patient's name, DOB and "bone marrow core" is one piece of dark brown porous tissue measuring 6 x 2 x 2 mm in greatest dimensions. The specimen is decalcified and entirely submitted in one cassette./RL

Microscopic Description:

One wright-giemsa peripheral smear: Red cells are borderline macrocytic. Rare Pelger Heut white cells seen. Platelets are normal in morphology.

Bone Marrow Aspirate:
Spicules: Present.
Megakaryocytes: Normal in morphology.

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Hematopathology Report

Erythroid: Slight nuclear enlargement and left shift with mild erythroid dysplasia.
Granulocytes: Normal in morphology.
Lymphocytes: Sparse. Mostly small in size. A few lymphocytes have more cytoplasm.
Other: minute population of normal appearing plasma cells seen.

200-cell count differential is performed:
- 8% lymphocytes by morphologic count.

Bone Marrow Biopsy/Particle Sections:
Biopsy: Adequate.
Cellularity: 65%
M:E ratio: 1 to 1
Megakaryocytes: Mostly normal in morphology. Rare megakaryocytic cluster seen.
Erythroid: Increased in number. Slight nuclear enlargement seen.
Granulocytes: Slightly hyperplastic, but normal in morphology.
Lymphocytes: On H&E sections, lymphocytes appear small in size. Negative for large atypical lymphoid aggregates or paratrabecular lymphoid aggregates. One small, benign, age related lymphoid aggregate seen.

CPT Codes:

88305, 88311, 88313 x4, 85060, 85097, 88342 x5

IHC & Special Stains:

Special stains:
Iron Stained Aspirate Smear: Storage: Present. Iron uptake: Focal.
Ringed sideroblasts: Negative.
Iron stain of 1: Positive, Adequate amount.
PAS stain of 1: Appropriate staining present.
Reticulin stain of 1: Negative for reticulin fibrosis.

Immunohistochemical stains:
CD3: ~ 10% T-cells including large granular lymphocytes:
CD4: positive in majority of cells
CD8: 10-15% positivity
CD56: Negative.
CD57: Negative.

Electronically Signed by:

Anand Kunda
Hematopathologist/Pathologist