Eosinophilia

Information from Celltac

WBC	8.3	[10³ /µL]
NE	3.9 *	47.5 * [%]
LY	0.9	10.8 L [%]
MO	0.5	6.0 [%]
EO	2.9 *	34.8 * [%]
BA	0.1	0.9 [%]

RBC	4.10	[10⁶ /µL]
HGB	12.3	[g/dL]
HCT	37.6	[%]
MCV	91.7	[fL]
MCH	30.0	[pg]
MCHC	32.7	[g/dL]
RDW	12.4	[%]
PLT	314	[10³ /µL]
PCT	0.20	[%]
MPV	6.5	[fL]
PDW	16.8	[%]
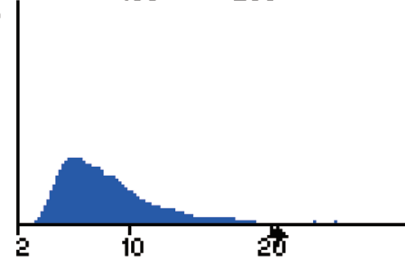
[WBC FLAG]
Ne-Eo Interference
Eosinophilia

[RBC FLAG]

[PLT FLAG]

RBC

PLT

WBC — SIZE / Complexity

SIZE / Granularity

SIZE / Granularity
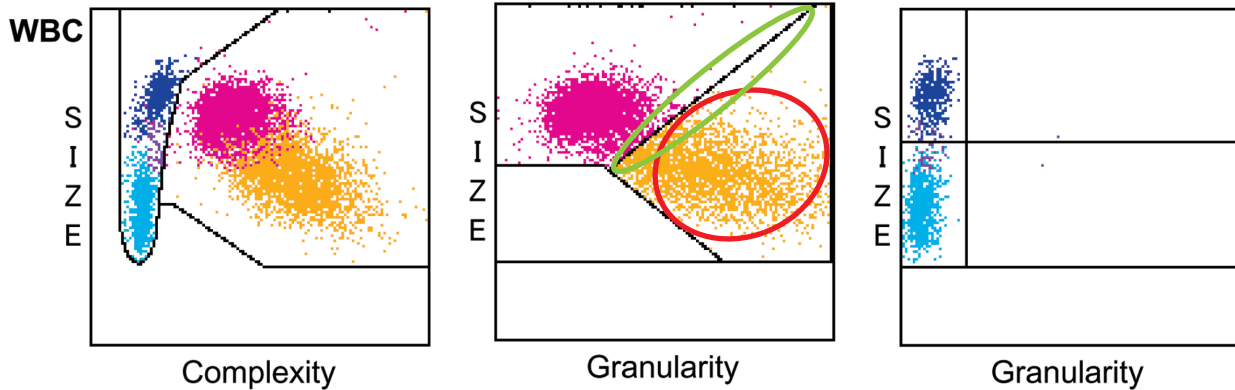
Data interpretation

A large population was seen in the EO area on the S-G (NE/EO) scattergram (O), and it triggered the Eosinophilia flag. The numeric data showed a relative and absolute eosinophilia (34.8% and 2.9 × 10³/µL). Since a number of immature and degranulated eosinophils appear around NE and EO areas, these two subpopulations overlap and generate the Ne-Eo Interference flag. This patient's eosinophilia was confirmed by microscopic examination and manual differential (EO: 24.5%).

Morphology

Immature eosinophil

Abnormal granules
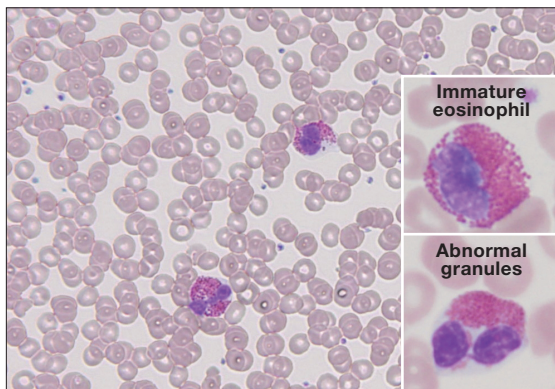
Doctor's comment

A higher ratio of eosinophils was confirmed by microscopic analysis. Among the mature eosinophils with a segmented nucleus, a few immature eosinophils were observed. Eosinophilia may be a reactive response triggered by several causes, such as bronchial asthma, parasitic infestation and drug allergy. Importantly this may also be accompanied by hypereosinophilic syndrome or malignancy and therefore requires further tests and clinical assessment.

Manual differential

Blast	
Promyelocyte	
Myelocyte	
Metamyelocyte	
Band	1.0%
Seg	56.5%
Lymphocyte	12.0%
Atypical Ly	0.5%
Monocyte	4.5%
Eosinophil	24.5%
Basophil	1.0%
Other	
Total	200
NRBC/100WBC	
RBC/other findings	ANISO (+)

NIHON KOHDEN

Information from Celltac

WBC	10.7 H	[10³ /µL]	
NE	7.9 *	73.5 *	[%]
LY	1.7 *	16.0 *	[%]
MO	0.2 *	2.2 *	[%]
EO	0.4 *	3.3 *	[%]
BA	0.5 *	5.0 *	[%]

RBC	4.28	[10⁶ /µL]
HGB	12.4	[g/dL]
HCT	38.6	[%]
MCV	90.2	[fL]
MCH	29.0	[pg]
MCHC	32.1	[g/dL]
RDW	14.1	[%]

PLT	467 H	[10³ /µL]
PCT	0.22	[%]
MPV	4.7 L	[fL]
PDW	16.7	[%]

[WBC FLAG]
- Blasts
- Atypical Lymphocytes
- Ly-Mo Interference
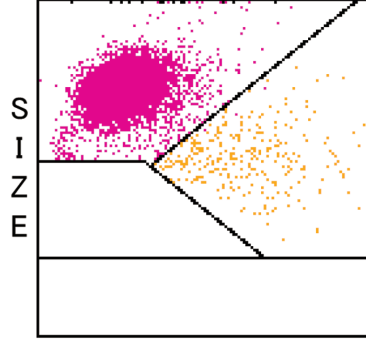- Basophilia

[RBC FLAG]

[PLT FLAG]

RBC

PLT

WBC
SIZE — Complexity
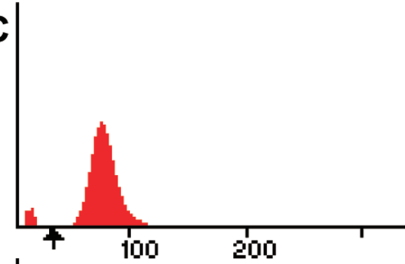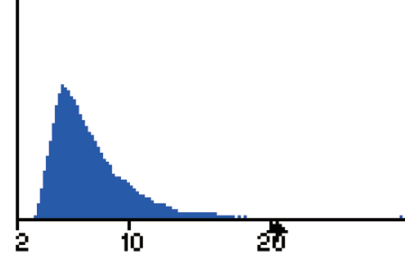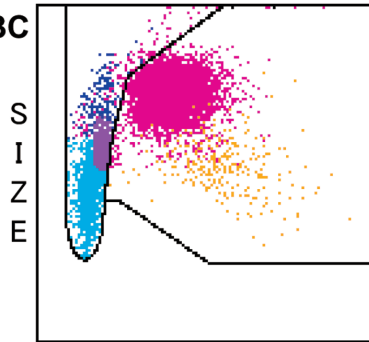
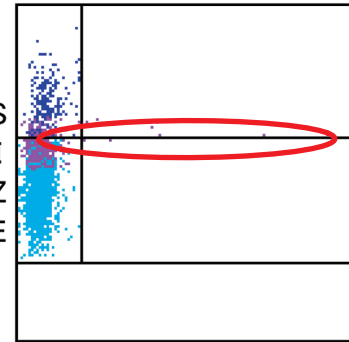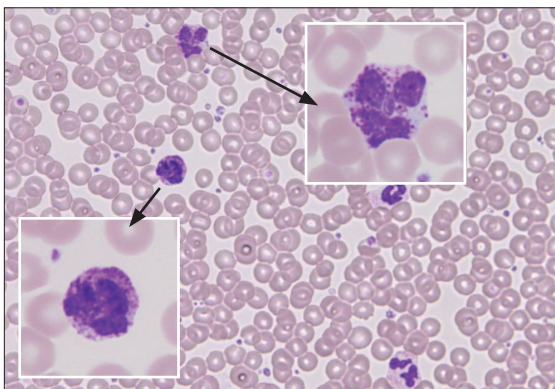SIZE — Granularity

SIZE — Granularity

Data interpretation

A large distinct population was confirmed in the BA area on the S-G (MO/BA) scattergram (O), and it triggered the Basophilia flag.

Morphology

Doctor's comment

On the blood film, increased leukocytes with a higher ratio of basophils were confirmed. Basophilia is often seen in cases of chronic myelocytic leukemia (CML) and occasionally myeloproliferative leukemia. Therefore further testing and clinical assessment is necessary. Neither blasts nor immature granulocytes were seen.

Manual differential

Blast	
Promyelocyte	
Myelocyte	
Metamyelocyte	
Band	
Seg	68.5%
Lymphocyte	16.0%
Atypical Ly	
Monocyte	1.5%
Eosinophil	4.0%
Basophil	10.0%
Other	
Total	200
NRBC/100WBC	
RBC/ other findings	