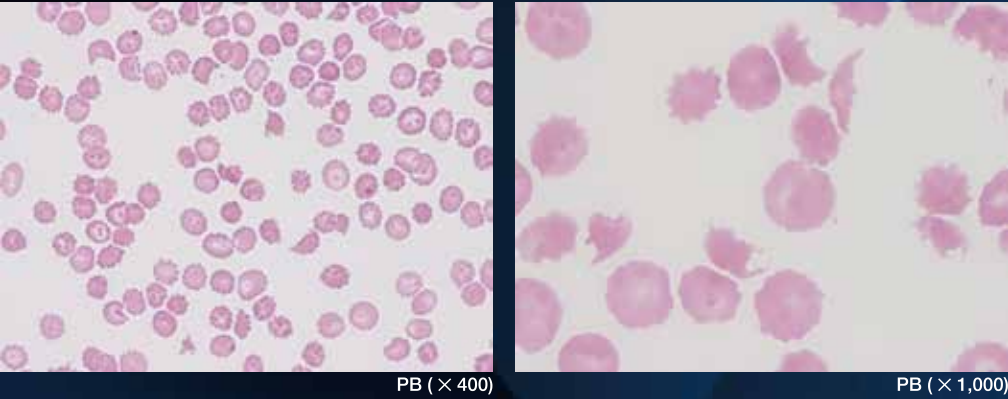


Case 12

Thrombotic Microangiopathy (TMA)

The patient was urgently admitted owing to anemia and thrombocytopenia during post-transplant follow-up after stem cell transplantation for leukaemia.

Blood smear (May-Giemsa staining)



Visual differential counts

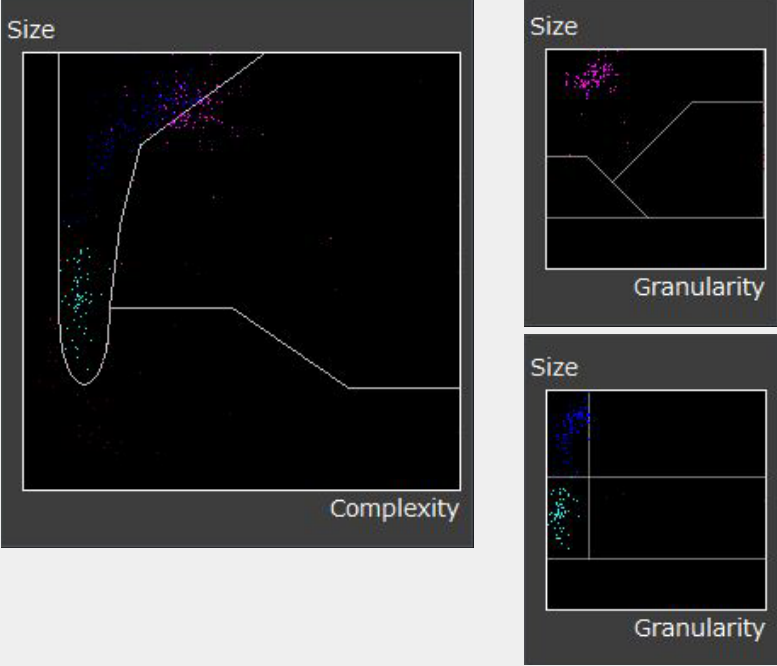
	(%)
Blast	0.0
Promyelo	0.0
Myelo	0.0
Meta	4.0
Band	24.0
Seg	34.0
Eosino	0.0
Baso	0.0
Mono	8.0
Lympho	30.0
Reactive-Ly	0.0
Other	0.0
NRBC	0.0

Celltac Data

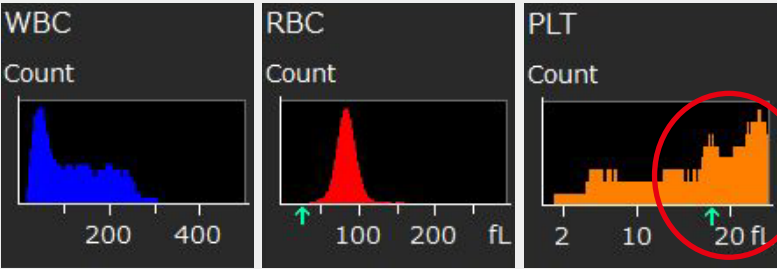
Numerical results

WBC	0.57	L	10 ³ /μL
RBC	2.29	*	10 ⁶ /μL
HGB	7.15	L	g/dL
HCT	20.1	L	%
MCV	87.8		fL
MCH	31.2		pg
MCHC	35.6	H	g/dL
RDW-CV	16.6	H	%
RDW-SD	58.3	H	fL
PLT	10.3	*	10 ³ /μL
PCT			%
MPV			fL
PDW			%
P-LCR			%
P-LCC			10 ³ /μL
NE	0.24	*	10 ³ /μL
LY	0.15	L	10 ³ /μL
MO	0.18	*	10 ³ /μL
EO	0.00	L	10 ³ /μL
BA	0.00	L	10 ³ /μL
NE%	40.92	*	%
LY%	26.98		%
MO%	31.65	*	%
EO%	0.00	L	%
BA%	0.45		%
RET	0.0034	L	10 ⁶ /μL
RET%	0.15	L	%
IRF	15.4		%
LFR	84.6	L	%
MFR	7.7		%
HFR	7.7	H	%

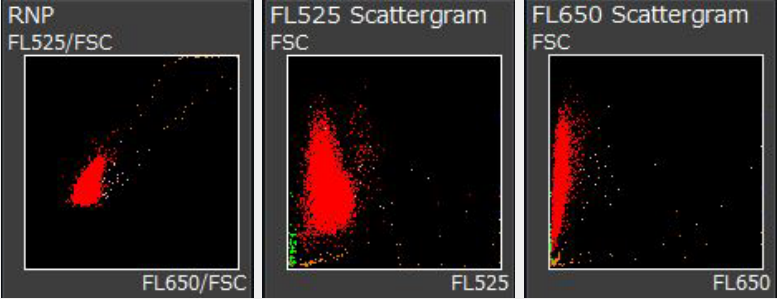
Scattergrams



Histograms



RET Scattergrams



Flags

Morphological Flags	Numerical Flags
Immature Granulocyte	Leukopenia
	Neutropenia
	Lymphopenia
	Anemia
	Thrombocytopenia
	PLT-RBC Interference

Explanation of scattergram/histogram

The PLT histogram shows a peak on the right side (○), deviating from the normal pattern. Additionally, the “PLT-RBC Interference” flag indicates interference by platelets and RBCs, suggesting the presence of schistocytes and small RBCs.

Explanation of case

The complete blood count showed an HGB level of 7.15 g/dL, MCV of 87.8 fL, and a platelet count of 10.3 × 10³/μL, indicating normocytic anemia and a reduced platelet count. Biochemical tests revealed the following findings: LD, 351 U/L; T-BiL, 7.0 g/dL; D-BiL, 1.6 g/dL; and Hp, <1 mg/dL. These findings indicated the presence of hemolysis. Peripheral blood smear shows numerous echinocytes, likely due to the effects of IV infusion. Additionally, schistocytes or fragmented RBCs were observed. The patient had undergone stem cell transplantation, and thrombotic microangiopathy induced by immunosuppressants was suspected.