

CASE 2 CHRONIC LYMPHOCYTIC LEUKEMIA

Case #2 is a 64-year-old male who presented with an elevated white count, nearly 63,000. Note again the absolute lymphocytosis, but in this histogram the lymphocyte peak is definitely shifted to the left, suggesting that these lymphocytes are smaller than normal. This patient's history shows a chronic lymphocytic leukemia of 10 years' duration.

The manual differential count showed 92.5% lymphocytes, compared to 87% on the automated three-part differential. The peripheral blood shows that the lymphocyte population is made up of small, mature-looking lymphocytes. This is a case of B-cell chronic lymphocytic leukemia.

The histogram showed us that these white cells are smaller than normal. It has been well established by other methods that the lymphocytes of typical B-cell chronic lymphocytic leukemia are smaller than normal.

LABORATORY

Manual Differential:

Neutrophils 7.0 Lymphocytes 92.5
Monocytes 0.5

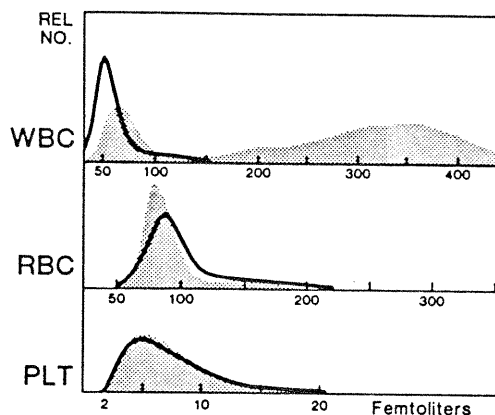
Peripheral Smear:

Marked increase in small lymphocytes with round nuclei
Anisocytosis — slight

SAMPLE-ANALYSIS INTERPRETATION

WBC: Curve characteristic of typical B-cell chronic lymphocytic leukemia.

IMPRESSION: Rai stage 0 chronic lymphocytic leukemia



WBC	62.9	H
LY %	87.0	HR1
MO %	9.2	HR1
GR %	4.1	LR1
LY #	54.5	HR1
MO #	5.8	HR1
GR #	2.6	LR1

RBC	4.37
HGB	14.4
HCT	41.9
MCV	95.9
MCH	32.9
MCHC	34.3
RDW	14.5

PLT	139.0
PCT	.119
MPV	8.6
PDW	16.2