

CASE 3 INFECTIOUS MONONUCLEOSIS

Case #3 is a 23-year-old female who presented with acute pharyngitis and a low-grade fever with tender anterior and posterior cervical lymph nodes. Her monospot test was positive.

Her white blood cell count is in the normal range, and she has a normal lymphocyte percent and absolute number. Due to abnormalities of the curve, however, there was an incomplete computation on the mononuclear and granulocyte populations. Note that the lymphocyte population has an abnormal curve with a shoulder to the right, suggesting that her lymphocyte population is abnormal and that many larger cells are present.

On her peripheral blood smear we see large atypical or variant lymphocytes, typical of infectious mononucleosis. Her other laboratory studies confirmed this diagnosis.

Here we see an abnormal lymphocyte population flagged R2 by the instrument. We have seen similar abnormal curves with R2 flags in several other cases of infectious mononucleosis.

LABORATORY

Monospot — positive

Heterophile: presumptive 1-3584
Guinea pig kidney 1-1792
Beef RBC 1-14

Manual Differential:

Neutrophils	35.0	Basophils	1.5
Lymphocytes	59.5	Metamyelocytes	0.5
Monocytes	2.5	Myelocytes	0.5
Eosinophils	0.5		

Peripheral Smear: Variant lymphocytes present

SAMPLE-ANALYSIS INTERPRETATION

WBC: Curve shifted to right with R2 flag and incomplete computation consistent with variant lymphocytes.

IMPRESSION: Infectious mononucleosis

