

CLINICAL CASE STUDY IN PAROXYSMAL NOCTURNAL HEMOGLOBINURIA

A 51-year-old woman diagnosed with PNH and a history of aplastic anemia who suffered a fatal stroke

PATIENT HISTORY*

Patient is a 51-year-old woman who was initially diagnosed with aplastic anemia in 2009. Her lab values at that time were significant for a white blood cell count of 1500/ μ L, a hemoglobin of 7.4 g/dL, and a platelet count of 30,000/L. She was treated with immunosuppression with an improvement in her platelets to 100,000/L, but still experienced persistent anemia with eventual transfusion-dependence and iron overload requiring chelation.

PATIENT ASSESSMENT/DIAGNOSIS

In 2011, given her persistent cytopenias, the patient was tested for PNH by her hematologist. High flow cytometry confirmed the suspected PNH diagnosis.

TREATMENT**

Repeat PNH testing at that time revealed a granulocyte clone size of 42%. That following weekend, the patient suffered a fatal stroke.

Laboratory Results at Referral		
Parameter	Result	Reference Range
High-Sensitivity Flow Cytometry		
RBC (%)	16	>1% PNH clone size for clinical relevance
Granulocytes (%)	42	>1% PNH clone size for clinical relevance
Monocytes (%)	53	0-9
Additional Assessments		
Platelet Count ($\times 10^9$ /L)	37	150-400
Hemoglobin (g/dL)	9.4	12.1-15.1
LDH (IU/L)	2500	105-333
D-dimer	1400	<0.25 ug/mL D-DU

*Hypothetical case adapted from actual patient data