



Practical Problems in Transfusion Medicine

Immunoematology Case Study 1

Part 1: Case Presentation

It is 7:00 am at Community General Hospital. You are a staff technologist beginning your shift in the Transfusion Service.

The technologist coming off the night shift tells you about a patient who came into the Emergency Department at 4:00am. She is 55 years old with an admitting diagnosis of GI bleeding.

A blood sample was sent to the laboratory with a transfusion order for two units of red blood cells. The laboratory has no previous record on this patient. The night technologist was busy covering the core testing laboratory and performed only the initial pre-transfusion testing.

Initial Test Results:

ABO and Rh Typing

Tests of cells with:			Tests of serum with:	
Anti-A	Anti-B	Anti-D	A ₁ cells	B cells
2+	0	3+	0	3+

Antibody Detection

Tests of serum with: Cells	Testing phase:	
	37°C	AHG
I	0	2+
II	0	2+
III	0	2+

All testing was performed by the conventional test tube method.

A low-ionic strength (LIS) additive was included in the antibody detection tests.

A monospecific anti-IgG was used in antihuman globulin (AHG) testing.

The Intensive Care Unit (ICU) has just called to ask when blood will be available. Your laboratory has one antibody identification panel.

- What are the possible causes of these serological results?
- What will you tell the ICU regarding the availability of blood?
- What other information about the patient would you like to know?
- What testing will you do next?