

ABID CASE #7 Questions:

1. What is the probable identity of this antibody?
2. Is any further workup needed to prove it? If additional cells need to be tested, select them from the following panel to complete the workup.

Lot #51877		Rh system						Kell						Duffy		Kidd		Lewis		P	MNSs				Lutheran			Xg	Other		
Cell	Rh	D	C	c	E	e	V	K	k	Kp ^a	Kp ^b	Js ^a	Js ^b	Fy ^a	Fy ^b	Jk ^a	Jk ^b	Le ^a	Le ^b	PI	M	N	S	s	Lu ^a	Lu ^b	Xg ^a	Typings	Cell	Gel	
1	R1wR1	+	+	0	0	+	0	0	+	0	+	0	+	+	0	+	+	0	+	+	+	+	0	+	0	+	+	C ^w	1		
2	R1R1	+	+	0	0	+	0	+	+	0	+	0	+	+	0	+	+	0	+	+	0	+	0	+	0	+	+	Bg(a+)	2		
3	R1R1	+	+	0	0	+	0	0	+	0	+	0	+	0	+	0	+	0	+	+	+	0	+	0	+	+	+		3		
4	R1R1	+	+	0	0	+	0	0	+	0	+	0	+	+	+	0	+	0	0	0	0	+	0	+	0	+	+		4		
5	RzR1	+	+	0	+	+	0	0	+	0	+	0	+	+	0	+	+	0	+	+	+	+	0	+	0	+	+		5		
6	RzR2	+	w	+	+	0	0	0	+	0	+	0	+	0	0	+	0	+	0	+	+	+	0	0	+	+	+	0	Co(b+)	6	
7	R2R2	+	0	+	+	0	0	0	+	0	+	0	+	0	+	0	+	0	+	+	+	0	0	+	0	+	0		7		
8	R2R2	+	0	+	+	0	0	0	+	0	+	0	+	0	0	+	0	+	0	+	+	0	0	+	0	+	+		8		
9	R2R2	+	0	+	+	0	0	0	+	0	+	0	+	+	+	0	+	0	+	+	+	+	+	0	0	+	+		9		
10	R1R2	+	+	+	+	+	0	0	+	0	+	0	+	+	0	+	0	0	+	+	0	+	0	+	+	+	+	Co(a-b+)	10		
11	r'r	0	+	+	0	+	0	0	+	0	+	0	+	+	+	+	+	0	+	0	+	0	+	+	0	+	0		11		
12	r''r	0	0	+	+	+	0	0	+	0	+	0	+	+	0	+	+	0	+	0	+	0	0	+	0	+	0		12		
13	rr	0	0	+	0	+	0	+	+	0	+	0	+	+	0	+	+	+	0	+	+	+	+	+	+	+	+		13		
14	rr	0	0	+	0	+	0	0	+	0	+	0	+	+	+	+	+	0	+	+	0	+	0	+	0	+	+	Di(a+)	14		
15	rr	0	0	+	0	+	0	0	+	0	+	0	+	0	+	+	0	0	+	+	+	+	0	+	0	+	+		15		
16	rr	0	0	+	0	+	0	0	+	0	+	0	+	+	0	+	+	+	0	+	0	+	0	+	+	+	+	Co(b+)	16		
17	rr	0	0	+	0	+	0	+	+	0	+	0	+	+	+	+	0	0	+	+	+	0	+	+	+	+	+		17		
18	rr	0	0	+	0	+	0	0	+	0	+	0	+	+	0	+	0	0	+	+	0	+	0	0	0	+	+		18		
19	rr	0	0	+	0	+	0	0	+	0	+	0	+	+	+	+	+	0	+	+	+	+	+	0	+	+	+		19		
20	Ror	+	0	+	0	+	+	0	+	0	+	0	+	0	0	+	+	0	0	+	+	+	0	+	0	+	+		20		
Patient																													AC		

3. What is the probable immunizing stimulus in this case?
4. Does this antibody cause hemolytic transfusion reactions? Hemolytic disease of the fetus and newborn?
5. How would we select compatible blood in this case? What percent of donors is expected to be compatible with this recipient?
6. What is the biochemical nature of the antigen? (Review the relevant blood group system, including disease associations and population differences in antigen prevalence for this and other antigens in the blood group system.)
7. Do you think the transfusion she received was necessary? What negative outcome did the transfusion have, besides the minor fever?