

iTRANSFUSEFACTSHEET

all about blood

I NEED TO KNOW ABOUT THE BOMBAY BLOOD TYPE

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What is the Bombay blood group?

The Bombay blood group is a rare blood type linked to the ABO blood group system.

Can you remind me about ABO?

Our red cells have many copies of a sugar or antigen called “H” on them. Other sugars add to “H” to make different combinations. A certain sugar combination will give the “A” sugar sequence, which we call the A antigen whilst another combination gives the “B” sugar sequence or B antigen. This is the basis for our ABO blood type.

Why is the Bombay blood group interesting?

Everyone has the H sugar – except someone with the Bombay blood group. These people lack the H sugar. Their cells cannot have the A or B sugars. What is really tricky is, even though they do not have the H, A or B sugars, when their red cells are tested with standard blood group tests, they appear as group O red cells!

How can I tell the difference between O and Bombay?

People without the H sugar (Bombay type) also possess an antibody in their plasma called anti-H. Antibodies are attack molecules to protect us against foreign proteins and sugars. Anti-H will react with the blood of everyone except those with the Bombay blood type. Anti-H can be detected in people with Bombay type but not in people with O type.

What does this mean for someone with the Bombay blood group?

People with Bombay blood group can only receive blood from another person with the Bombay blood group. If they receive any other type of blood their anti-H will attack the transfused cells.



Are there other rare blood types?

The Bombay blood group is one of many rare blood types. You are familiar with blood groups A, B AB and O yet these are only four of nearly 300 blood types currently known. Inevitably there are some blood types or their genetic variations that occur less commonly and racial or ethnic differences can also affect the nature or prevalence of different blood types.

What happens if I need a blood transfusion and I have a rare blood group ?

If you have a rare blood type it might be difficult finding suitable donor blood. We may be able to call up donors with the same rare type, locate blood in our frozen bank that we maintain especially for rare blood types, or we may even obtain blood from overseas blood services. Alternatively, in the lead up to elective surgery you may be able to donate your own blood which will be stored for you in case you need it.

PACKFACT

The frozen rare blood group banks are stored in Sydney, Melbourne and Perth.

I have a rare blood type. Can I be a blood donor?

If you are fit and healthy you should definitely become a blood donor since a rare blood type makes you an extremely valuable donor. According to your particular rarity we may collect your blood and freeze it in our frozen bank so there is always stock available or we may call you to donate as required for a particular patient.

The information contained in this fact sheet is not intended to be medical or professional advice. The disclaimer found at transfusion.com.au applies to this fact sheet.

For more information visit
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