



Colombia imports a rare blood type to save the 15-month-old girl

In an unprecedented experience, the Ministries of Health of Colombia and Brazil and the INS manage to transport phenotype blood from the Bombay of Fortaleza to Medellín.

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The first importation of blood to Colombia, which in turn was the first export of this biological material from Brazil, saved the life of a 15-month-old girl hospitalized in San Vicente de Paúl, from Medellín.

Under normal conditions, a blood transfusion would never have required such complex logistics. But this was a particular case since no other Colombian has been identified that has the blood type of the minor, known as "Bombay phenotype."

The procedure, successfully carried out today at San Vicente de Paul, was the outcome of an odyssey that began last Tuesday, when the child arrived at the hospital in the Antioquia capital with vomiting and choppy breathing. The medical examination found that the girl had low weight for her age, anemia and - most serious - a hemorrhage in the digestive tract that made the transfusion urgent.

Although initial examinations concluded that the type of blood to be transfused was O negative, none of the samples were compatible. For this reason, specialized examinations were carried out, which concluded that the child had no A, B or AB blood, but the Bombay phenotype, which, according to the scarce scientific literature on the subject, has one per 10,000 inhabitants in India (The country where it was first described) and one in every one million in Europe.

"The girl's body does not recognize any known blood," explains María Isabel Bermúdez, coordinator of the National Network of Blood Banks of the National Institute of Health (INS). A transfusion with the wrong type would have caused kidney damage and even death."

On Friday, July 7, after reporting on the case, the INS started looking for potential donors in Colombia. Since the effort was unsuccessful, it expanded the search to other countries in the region, through a network made up of the Pan American Health Organization.

The network of blood banks in Brazil was the only one to report that it had identified a possible donor. He was a young man of 23 years, resident in the city of Fortaleza (northeastern Brazil), aware of its biological and sensitized on the subject of donation. On Saturday, the young man donated 370 milliliters of his blood, an amount comparable to that of a personal bottle of soda.

The following challenges were to obtain permits to export blood, which involved the participation of the International Cooperation Office of the Ministry of Health of Colombia and of its peer in Brazil, and ensure that the blood arrived in good condition to the body of its recipient final.

Natalicia Silva, a nurse at Fortaleza's blood center, volunteered to travel with the blood bag and ensure that, within a refrigerator, she maintained the right temperature for a further 20 hours of travel. After stopping in Sao Paulo, Panama and Bogotá, the blood arrived at six in the afternoon yesterday to the hospital San Vicente.

Confirmed compatibility, the biological material was fragmented: 80 cubic centimeters were intended for transfusion to the girl - was the amount required for her weight and age - and the rest, to conserve in case of a new need. As María Isabel Bermúdez explains, because the phenotype is not the Bombay cause of disease, people with this type of blood are usually healthy and that is why they are not identified.

Martha Lucia Ospina, Director of the INS, highlights the learning and the value of the experience. *"This is an unprecedented story that shows us that we have reached unthinkable capabilities a couple of decades ago. Finding a donor in a different country, obtaining the permits in record time, transporting the blood, conserve the cold chain and transfuse in a timely manner are steps that require complex logistics. Here we are not only seeing good use of new technologies and networking. We are seeing how international cooperation saves lives."*