

Spanish haematologists warn against storing umbilical cord stem cells in private banks

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Spanish haematologists are warning against storing umbilical cord stem cells in private foreign clinics because of the risk that transportation will render the cells useless.

The practice of keeping the cells from the umbilical cord in private banks became popular after the Spanish crown prince, Felipe de Borbón, and his wife Letizia made public in 2006 that they sent blood from the umbilical cord of their baby, future queen Leonor, to a private bank in the US. At the time, there were only public stem cell banks in Spain, but shortly afterwards the Ministry of Health authorised the first private bank.

The law governing blood banks means that parents cannot keep umbilical stem cells for their own use, but that—as happens with organ donations—private banks must make the cells available to anyone in the Spanish health system who needs them. For that reason most private banks send the cells abroad. Private companies charge around €1500 (£1280; \$2000) for collecting the cords and €200 annually for storing the stem cells.

It is estimated that about 20 000 people have arranged to have their child's stem cells stored in facilities in countries such as Germany, Belgium, and Poland while about 40 000 have used Spanish public clinics.

A statement issued at the annual meeting of Spanish haematologists in Zaragoza at the end of October says that more than 90% of the patients who need units of blood from umbilical cord can get them from Spain's public banks. The other 10%, who usually have a different genetic profile to most of the Spanish population, can apply to immigrant patients with whom they are likely to be more closely matched.

Guillermo Sanz, a member of the Spanish Society of Haematology, discourages the use of private banks because it's "very probable that the genetic alteration that causes a malign disease is also present in the blood of umbilical cord of the child." He has asked the government to change the legislation so that private banks have to adhere to the same quality standards as public banks.

Rafael Matesanz, the director of the National Transplant Organization, agrees with the haematologists' warning. He said

there was no guarantee that private banks that operate in Spain but store cells abroad comply with Spanish standards.

"We were notified by Portuguese authorities of an autologous bank over there that was inspected for local health authorities because it did not follow the requisites needed," he told the *BMJ*.

Rafael Fores, chief of haematology in Hospital Puerta de Hierro, in Madrid, said that the problem was not the risks of transportation, but that collection and storage of umbilical cells might not be of the same quality as that required in Spanish public banks.

"A substantial percentage of the cords that we receive in public banks are rejected because they don't have enough stem cells," he said.

Yves Beguin, from the department of haematology at the University of Liege, pointed out that most scientific commentators do not support cord blood storage. The American Society for Blood and Marrow Transplantation published a position statement in 2008 (<http://asbmt.affiniscape.com/associations/11741/files/CordBloodReport-Collect-Preserve.pdf>) that says the "private storage of cordon blood for future use by the newborn is not routinely recommended because the likelihood of the stored blood being used for allogeneic hematopoietic stem cells transplants (HSCT) is very small in the first 20 years of life. If later in life a transplant is required, there likely will be superior sources of suitable stem cells than the child's own CB [cord blood]."

Leroy Edozien, consultant obstetrician and gynaecologist from St Mary's Hospital in Manchester, rejected a ban on private banking, but said, "Spanish authorities are right to prioritise public banking, because this will serve the best interests of the majority."

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