Summary of the American Academy of Pediatrics Policy Statement: Cord blood banking for potential future transplantation (From the American Academy of Pediatrics; policy statement)

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In numerous genetic, hematologic, immunologic, metabolic, and oncologic conditions, bone marrow transplantation can be life-saving. The procedure can be allogeneic or autologous, and allogeneic procedures have a higher chance of success the more compatible the donor and the recipient are. The use of cord blood over peripheral blood provides several advantages, such as the ease of collection, the decreased risk of transmission of infectious diseases, and the reduced risk of graft-versus-host reaction. Autologous transplantation has also been used for gene therapy in children with severe combined immunodeficiency.

Blood may be stored in private cord blood banks and may be available only to the donor and/or the donor’s relatives; they may also be stored in public cord blood banks for universal use. Private use has not been well established because there is no evidence of the safety and efficacy of autologous transplantation. Because the mutations that cause diseases that are treatable with umbilical cord blood transplantation are present in the DNA of umbilical cord blood, allogeneic transplantation is indicated in most cases. Cord blood stocks are currently low. Therefore, the importance of public donations should be notified to health care professionals as well as the general public.

According to the Cord Blood Banking for Potential Future Transplantation manual (link below), private donation should be discouraged. In addition, the conflicts of interest and economic motivations of private cord banks as well as their overall lack of supervision and accreditation should be considered.

It is up to health care professionals, particularly, pediatricians and obstetricians, to be aware of the importance of public cord blood donations and to inform patients about it. It is also important to train teams on how to collect and store umbilical cord blood.

We hope that reading the AAP protocol will contribute to a better understanding of the procedure, thereby initiating a discussion regarding the best ways to perform it.

Link to the protocol:
http://pediatrics.aappublications.org/content/early/2017/10/26/peds.2017-2695

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