In Defense of the American Academy of Pediatrics Policy Statement—Children as Hematopoietic Stem Cell Donors

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I want to thank the editors of Pediatric Blood and Cancer for asking me to respond to 2 commentaries[1,2] regarding the new American Academy of Pediatric (AAP) statement on Children as Hematopoietic Stem Cell Donors, a statement for which I was the lead author on behalf of the Committee on Bioethics.[3] AAP statements undergo an extensive review process before they are considered by the Board. In this case, the reviewers included the AAP Section on Hematology and Oncology. I am writing this as an individual and not as a representative of the AAP, but would like to acknowledge my former committee members who made helpful comments on earlier drafts of this commentary. I also want to thank Mr. Revera for sharing his family’s story. I assume by the tone of the commentary that both his donor-child and his recipient-child are doing well. That is a wonderful outcome. I also want to thank Dr. Joffe for acknowledging his role in writing the AAP policy statement. Dr. Joffe and I worked on this statement together for over 2 years, through many layers of review by the AAP. Dr. Joffe deserves public credit for his help in developing what I will argue was and remains a valuable set of recommendations for the stem cell transplant community.

Revera and Frangoul’s main objection to the AAP statement is the role of the donor advocate. They claim that the policy aims to remove parents from the process and replace them with an unknown donor advocate. The authors mischaracterize the donor advocate: It names a role whose primary function is to support potential donors and their families in the evaluation and donation process. It is not meant to substitute, but to supplement parents who may be so preoccupied with their ill child that they are willing to do anything to find a potential donor, without giving considered thoughts to the risks and benefits that the donation may pose to their other child. Nor should the donor advocate be viewed as a judge about reasonable decisions being made by parents in an intimate family. The donor advocate serves as an ally to both the donor child and his or her family, and is only empowered to prevent sibling donations in very rare circumstances.

The AAP statement is meant to be quite deferential to parental authority. However, there are limits or constraints to parental authority,[4] and one of those limits occur when parents need the help of third parties.[5] It is one thing to allow your child to cross the street for the first time or to ride a bicycle in traffic. Parents have obligations to protect their children but also to promote their autonomy. It is also appropriate for parents to want their healthy child to serve as a bone marrow donor for an ill sibling, even when the chances of success are remote and even when the healthy child has no emotional relationship to the ill child (See the case of Curran versus Bosze below). But to have a child serve as a bone marrow donor requires the assistance of health care providers who are also moral agents.[6] And there are situations in which it would not be appropriate for health care providers to permit a child to serve as a bone marrow, despite parental permission. None of the health care providers involved in the case of L.R. should have agreed to allow her to serve as a bone marrow donor.

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donor to her half-brother A.R. who is serving time for sexual assault against L.R., despite the fact that her mother gave permission and she did not verbally object.[7,8]

Clearly the case of L.R. is a negative extreme. But there are other scenarios, also rare, when doctors or other health care providers might refuse to permit a child to participate as a bone marrow donor. Such were the physicians at the University of Chicago who argued in defense of the defendants in Bosze versus Curran.[9] This case involved a man, Mr. Bosze who was the father of three-and-a-half year old twins, Allison and James Curran, with Ms. Curran and the father of 3 other children with 3 other women. One of his sons, Jean-Pierre, was ill with relapsed undifferentiated leukemia and the only chance of cure was a bone marrow transplant, described as having, “at best, optimistically, somewhere between 1 and 5 percent chance”[9 at 47]. Mr. Bosze asked Ms. Curran, the mother and legal guardian, to allow their children to undergo HLA testing and bone marrow transplant but she said it was not in their “best interest”. She noted that the children had only met their half-brother twice and thus did not have a close relationship. The Court sided with Ms. Curran, offering 3 criteria that must be fulfilled for a court to allow a child to serve as a stem cell donor: (1) the consenting parent must have been informed of the risks and the benefits of the procedure; (2) there must have been emotional support available to the child from his or her caretakers; and (3) there must have been an existing, close relationship between the donor and recipient.[9] The Court rejected Mr. Bosze’s claim because there was no existing relationship (criteria 3) and worried that without Ms. Curran’s support, criteria two might also not be met for the donor child. In the AAP statement, these criteria were accepted with minor language revision. The AAP also added another criterion, that there should be some “reasonable likelihood of success” which may also not have been met in this case given that the physician could not get Jean-Pierre into remission.

The lack of an existing relationship is the same error made in a case presented by Kesselheim, Lehmann, Styron, and Joffe in Archives of Pediatrics and Adolescent Medicine. [10] In that case, parents had adopted a child who developed leukemia. The adopted parents sought out the biological parents to have their other children tested to determine if they were HLA compatible. In the end, the children were not HLA compatible and so the question of whether they should have been allowed to be bone marrow donors did not get addressed. But the biological children were strangers and therefore not appropriate donors.[11] Given that they were not appropriate stem cell donors, there was no moral justification to perform the HLA typing. This is why HLA typing must be understood as part of the transplant process.[3,11]

The AAP policy statement asserts that a donor advocate be retained prior to HLA typing. Revera and Frangoul reject this because it “can be a costly process to simply determine whether or not a simple blood test should be carried out.” Revera, who is both a parent and lawyer, then adds, “That fact is not likely to be lost on the Court. Both legal and political realities dictate that the Court is going to allow the HLA test to be conducted, even if it has to later consider whether or not to permit the transplant.”[1] Actually this is not the case. In Curran versus Bosze, the Illinois Circuit Court ruled:

“The circuit court concluded that the issue of the HLA blood test should not be bifurcated from the issue whether it is appropriate, under the circumstances, for the twins to donate bone marrow. Since there is no reason to order the HLA blood test if it is not appropriate for the twins to donate bone marrow, the circuit court properly refused to bifurcate these issues.”[9 at 527]

The Circuit Court’s decision is important because it realized that HLA typing is not a simple test, but rather, it is the beginning of a process that ends in the procurement of bone marrow.
No one would recommend HLA typing unless the individual being tested was willing to consider being a donor.

There is another setting in which a simple blood test has been come to be understood as much more than minimal risk. In the prenatal world, women are often routinely tested for maternal serum alpha-fetoprotein (MSAFP), a simple blood test that may show that a fetus is at increased risk of trisomy or other fetal anomaly. Critics argue that women are not given a clear explanation of the purpose of the test, that most are told “we are testing the health of your future baby.”[12–14] Women who have a positive MSAFP are then counseled to undergo an invasive test (amniocentesis) to determine whether the fetus will have a disability in order to decide whether or not to terminate the pregnancy. After understanding the true purpose of the MSAFP testing, some women express anger because they would have preferred not to start down this path. I am not suggesting that the risk of being a bone marrow donor compares with the risk of undergoing amniocentesis, nor that the purpose of the two invasive procedures that proceed the initial blood test are similar. I am arguing, however, that MSAFP testing and HLA typing are not merely simple blood tests but the door to much larger processes. To deny this is false and is to ignore the voices of experience.

But let us return to Mr. Revera’s concern that the donor advocate fails to respect parental authority. Mr. Revera makes it clear that he believes he had the right to require his children to serve as stem cell donors. He writes that he explained to his children that one was ill and that the others might be able to help by being a bone marrow donor. He then writes: “Each was asked: If you can help, will you? Thankfully, each responded in the affirmative, and the Reveras’ 5 year old son was a perfect match. However, even if the answer had been no, it would not have changed the end result.”[1]

This is a very telling dialogue and requires three comments. First, why were the children asked if they assented if a negative response (a dissent) would not have changed the end result? It teaches children the wrong lesson: you will only be heard if you give the right answer. This fails to respect the child’s developing autonomy.[4] The children should have been informed that they would be expected to help if they could.

Second, children want to please their parents and it will be the rare child who will say no when told that he or she is expected to help a sibling for something that is so important to his or her parents. When they do say “no”, then someone should listen. I am going to assume that Mr. Revera is a good parent and I wager that despite his claim that “it would not have changed the end result”, it would have changed the process. His child’s refusal would have been heard and addressed. It would have pushed Mr. and Mrs. Revera to ask the child why he did not want to help. They may have learned that he was afraid of needles or that he thought he might get sick and die too. Or they may have learned that he was angry that his ill brother was getting all of the family’s attention. All of these responses would be reasonable from a 5 year old, the age of the donor in the Revera household, and should not be a reason to exclude the child from serving as a donor. It would, however, serve as a wake-up call that the information needs to be explained in a more child-friendly fashion and that the parents and extended family needs to provide support to the healthy siblings. And in the end, the Reveras would have been able to convince their child to serve and the donor advocate would have supported their and their child’s decision. In fact, the donor advocate would have worked with them and their child to help address these issues.

Third, the donor advocate is not meant to replace parents but to supplement parents. Most parents want to do what is right by their children, both those who are ill and those who are healthy. In intimate families (which come in many different adult and child combinations), most children will abide by their parents’ decisions regarding health care, even elective
health care like serving as a bone marrow donor. In such families, the donor advocate serves as another support person for the child donor and family. For those parents who think this is unnecessary, they should read the literature. The AAP statement cited references that show that many donors feel that they were inadequately prepared for what to expect after the infusion.[15–17] Many donors, both children and adults express frustration that they are ignored after the donation occurs as all return their focus on the ill sibling.[18] The reason may seem obvious: the ill recipient’s life hangs in the balance whereas the donor was and is healthy, albeit having undergone an invasive medical procedure. And yet, from the donor’s perspective, the donor has undergone a medical procedure that is painful and scary and not for his or her own direct benefit.[19–21] And if the recipient dies, the donor feels guilt, guilt that may be ignored as each family member deals with his or her own distress.[22,23]

Like Mr. Revera, the AAP position is that parental permission alone is often adequate for the participation of the young child as a stem cell donor and his or her assent is not necessary, “unless state law or institutional policy requires the minor’s active assent” [24 as cited in 3 at 398] The AAP statement, however, is clear that a dissent by any child should be further explored:

“while parental consent alone will often be sufficient, a donor advocate should explore the reasons for the refusal and determine if further education and discussion can modify the minor’s refusal. A child mental health professional and/or an ethics consultant/ethics committee may also need to be involved to help clarify the child’s concerns. The donor advocate, child mental health professional, ethics consultant, or ethics committee must have the authority to suspend or prohibit a donation if it is determined that the donation is likely to have a serious and sustained longterm adverse effect on the donor. The recipient should not begin myeloablative preparation for bone marrow infusion (conditioning) unless there is a clear decision to proceed with the donation. Once the recipient has begun conditioning, the child donor should not be offered the opportunity to renege, because this would be lethal to the recipient.”[3 at 398–339]

The AAP statement regarding minors as stem cell donors does not require the active assent of all child donors because, like Mr. Revera, the AAP appreciates that intimacy entails some obligations; “brother helps brother”. [1] And yet, when the older child objects to serving as a donor and cannot be convinced to do otherwise, a third party like a donor advocate or some similar mechanism is needed to help understand why the child is refusing and whether the refusal is for morally valid reasons. A refusal because of sibling rape should be determinative.[8] A refusal by a young child who fears needles can be overcome by appropriate counseling, play therapy, and if necessary, the promise of some material reward. It would be rare for a donor advocate to halt a sibling donation in most intimate households. While the donor advocate should have the authority to stop a donation in order to protect the rare child who needs to be protected, the main role of the donor advocate is focused on how to minimize risks and harms to the donor and how to maximize the medical and psychological well-being for the majority of other child-donors. It is a win-win situation.

Mr. Revera is also concerned because the parents do not choose the donor advocate who may be in opposition to the parent. I would point out that parents rarely choose all of the health care providers who care for their children when hospitalized. They do not choose which nurses are on the floor nor do they choose the anesthesiologist who participates in the bone marrow procurement. Rather, Mr. Revera and all parents may choose the hospital in which these services are provided and should expect and trust that all members of the transplant programs are high caliber professionals.
Interestingly, although Joffe and Kodish argue that they want to change the AAP recommendation regarding the donor advocate, their alternatives are consistent with our recommendation. The AAP recommendation regarding a donor advocate clearly states:

“The “donor advocate” [or some similar mechanism as befits an individual program] should not be involved in direct patient care of the potential transplant recipient. The donor advocate or, if necessary, a donor advocate team should have (1) training and education in child development and child psychology, (2) skills in communicating with children and understanding children’s verbal and nonverbal communication, and (3) working knowledge of hematopoietic stem cell donation and transplantation.” [3 at 398, references omitted]

In other words, the donor advocate is not meant to be a legal figure who carries the scales of judgment and decides yes or no regarding the ill child’s life. First, even in the rare case where a sibling is prevented from serving as a stem cell donor, there are other stem cell transplant possibilities using cord blood or matched unrelated donors and even haplotype donations. Of course, these options have different degrees of likelihood of success and likelihood of graft versus host disease. But it is not the case that the donor advocate would have authority to prohibit any and all stem cell transplants.

Second, the donor advocate is meant to serve the role as an advocate for the donor child. Joffe and Kodish ask why this role cannot be played by the child’s pediatrician? [2] It could. It would require the pediatrician acquire adequate knowledge about stem cell transplantation and would need the authority to say “No this child is not an appropriate candidate” In some ways the general pediatrician might be in a better position to say no to the transplant physicians in contrast with an allied health professional with whom power differentials may be greater. But it is not clear that all pediatricians will be willing to accept this role as it will require that they learn about current stem cell transplant methodologies, the risks and benefits, the alternatives and why one type of donor would be preferable in a situation versus another.

While Joffe and Kodish express concern about the cost of a donor advocate they do not explain who will pay the general pediatrician to do his or her homework and then provide counseling. They also do not adequately address a concern they express about quality control when “donor evaluation and consent move outside the transplant program”. [2]

Rather the only solution they offer is to require that transplant programs have two separate teams, one for the donor and one for the recipient. This recommendation was considered and rejected by the AAP. While feasible in large transplant programs, the data show that this does not occur in 70% of transplant units. [25] But if all transplant programs were required to have 2 separate teams, then the donor team would serve as the donor child’s advocate because it would be focused on the child-donor’s best interest. While two teams may be ideal, such a requirement may represent a true financial conflict of interest. It would require either that all transplants be done at large centers or that small programs support two separate teams. The problem with this latter solution is that it is even more expensive than asking a general pediatrician to self-educate regarding stem cell transplantation. The donor advocate mechanism proposed by the AAP may be fulfilled by an individual who may already be employed primarily by the institution in other capacities such as a social worker or a child life specialist and need not add excessive cost. [3]

Finally Joffe and Kodish suggest that the 2 team model

“…could be supplemented by an independent donor advocate mechanism, such as that envisioned by the AAP, in those rare instances where the ethical appropriateness of donation was uncertain due either to elevated medical risks to
the donor or to the absence of an intimate relationship between donor and recipient.”[2]

The problem with this model is that in the chaos that surrounds a very ill child, the rare instances when a donor advocate would be necessary to require a reassessment of the child as potential donor may not be appreciated until months after the donation has occurred and the dust has settled. The value of incorporating a donor advocate mechanism from the onset is to identify just those situations that Joffe and Kodish describe. And the two scenarios that they describe (i.e., elevated medical risk and lack of intimacy) are two of the criteria that we believe should be assessed in all cases by the donor advocate mechanism, even though in many cases the review will be appropriately short. However, incorporating a donor advocate mechanism in all donations has the added value of providing a resource to the donor when he or she may not be receiving the focus of attention that is often given to a child-patient because of the relative vulnerability of the donor compared with the recipient.

Let me conclude with one final response to both Mr. Revera and to my colleagues Joffe and Kodish. The AAP statement was designed with the presumption that the donor advocate would rarely reject a minor donor from serving as a stem cell donor. The donor advocate model at MD Anderson hospital can serve as an effective and functional example.[26] The donor advocate is meant to routinely serve as the child’s ally, reminding the family and team that the donor is a patient and needs attention; and serving as a resource for the child when the recipient’s team and family are not available. Many hospitals have child life programs (again, not selected by Mr. Revera) and social workers. The donor advocate is just one more member of the donor team dedicated to promoting the donor child’s best interest.

When a child becomes a patient for the best interest of a sibling, we must ensure that his or her own interests do not get lost. The donor advocate mechanism is not meant to be a threat to parental or physician autonomy, but rather a supplemental ally to the donor and donor family. Parents in Mr. Revera’s position should embrace this additional ally; transplant physicians like Joffe and Kodish should value the input and support that the donor advocate provides to the “other” patient.

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References

24. Wisconsin Statute S.146.34(4) (2005)