The Kidney Paired Donation (KPD) Conundrum

Imagine you are fortunate enough to have a living kidney donor. Your donor is healthy enough to donate but you learn they either have an incompatible blood type or you carry an antibody that will reject this person’s kidney. Having these antibodies is commonly referred to as being sensitized and this will make it more difficult to find a compatible donor. These antibodies develop if you’ve had a blood transfusion, a previous transplant or giving birth for some women. Approximately one third of all potential living donors are not compatible with the person they intend to donate to.

While this can feel devastating to learn, better anti-rejection drugs and Kidney Paired Donations, (KPD) also called paired exchanges, chains or swaps allow these incompatible donors to help their intended recipient by donating to another recipient who has an incompatible donor. In short, these two recipients swap their incompatible donors. KPD’s have the potential of adding thousands of kidney transplants a year if a centralized national program is developed that will register all incompatible pairs.

The likelihood of finding a compatible pair is increased when there are many incompatible pairs within your pool. However, there are exceptions to this, when a pool contains many difficult pairs to match. For instance, if the recipient has a rare blood type or is highly sensitized. If you agree to pursue a KPD, you should ask, how long an incompatible pair similar to you and your donor had to wait to be paired up with another incompatible pair.

Here’s the Conundrum. Let’s say you and your incompatible donor want to pursue a KPD. The following are the different types of KPD programs developed.

1. A transplant hospital has a dedicated KPD program. The hospital will try to match you with the other incompatible pairs they have registered at their hospital.
2. Some hospitals share their incompatible pair lists with other hospitals within their immediate area. The Johns Hopkins program is a good example of a transplant center working with others in their area.
3. Hospitals like the Mayo Clinic have facilities in different markets and they share their information with the other hospitals.
4. Some hospitals are developing relationships with other transplant hospitals in different parts of the U.S. so they could benefit by having a larger pool of incompatible pairs.
5. There are 3 national organizations that don’t do transplants but they have developed a “cooperative” type of relationship with many hospitals. Some of these organizations have over 100 participating hospitals.

It’s important to learn as much as you can about the hospital’s program and the extent to which they affiliate with other KPD programs. You need to know whether they share ALL of their incompatible pairs. Some hospitals will keep the easy to match pairs and offer the more difficult pairs to their exchange member. This is not an efficient way of maximizing KPD programs.

There isn’t one national “list” like the kidney transplant waiting list for a deceased donor kidney. With this in mind, here are your potential options to maximize your opportunities for a match:

- If your original transplant hospital has a KPD program register with the hospital.
• Look for other transplant hospitals with KPD programs and register with them. Find other KPD programs working with many hospitals as described above in points #2, #3 and #4.
• Register with one or all of the national “co-op” programs as described above in point #5.

No doubt this might take a good deal of effort, but what is more important is increasing the odds of being matched with another incompatible pair. If you are a relatively easy incompatible pair to be matched, (i.e. a recipient with an A blood type and not very sensitized, and you have an O blood type donor), you might not need to be registered with many KPD programs to find a match. But, if you are a pair that is more difficult to match, i.e. a recipient that is highly sensitized, then you may want to register with as many programs as possible. Having a donor with an O blood type will increase your chances of finding a match in a KPD program.

Keep in mind that you can register with many KPD programs. There are people who have registered in over eight programs to increase their odds of finding a compatible pair.

While important, registering at multiple programs requires more work for the recipient and the donor. Sometimes recipients are hesitant to ask the donor to go to additional lengths to find a match, but they may be surprised at how receptive the donor is to the request. Some transplant programs will accept many of the tests completed for you and your donor at another facility, but it is likely they will require both to visit their hospital for some additional blood tests and/or the psychosocial tests for the donor.

Another question you could ask each KPD program is how their incompatible pairs are matched up. Is there a group or committee making these decisions or is there one individual who decides on these matches? You could also ask what criteria they use to prioritize pairs.

KPD’s are relatively new to the transplant community and will go through many changes in the next few years. Currently they may not be structured in the most efficient way, but hopefully in the future these programs will work together to help those who are most in need.

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For a more detailed description of KPD’s go to: www.lkdn.org/LKDN_Paired_Exchange.pdf

If you would like to receive a list of the national “co-op” organizations referenced please send your request to: info@LKDN.org

Harvey Mysel is a two time kidney transplant recipient. Harvey is the founder of the Living Kidney Donors Network, a nonprofit organization offering FREE workshops, webinars and private consultation to educate people in need of a kidney transplant about living kidney donation and helps prepare them to effectively communicate their need to family members and friends. The LKDN assists those who are interested in being a living donor through the transplant process. The LKDN website is: www.lkdn.org and Harvey can be reached at: harvey@lkdn.org