Kidney Paired Donation

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Objectives:

After participating in this session, the attendee will be able to:

- Discuss the basic fundamentals of Kidney Paired Donation
- Describe the impact on Living Donor transplantation
- Outline the necessary patient education requirements



Why Kidney Paired Exchange

- Approximately 1/3 of patients who come forward with a potential living donor(s) will be incompatible due to:
 - OBlood type incompatibility
 - **OHLA/Crossmatch incompatibility**
- Other patients have a willing, compatible donor with whom they are chronologically incompatible
- Some patients have a willing, compatible donor but are seeking a better genetic match



Kidney Paired Donor Exchange

- Conceptualized in 1986:
 - Evolved as a means to facilitate kidney transplantation for patients with incompatible blood types or positive cross matches with otherwise acceptable kidney donors
 - Non-directed (altruistic) donors, with no preconceived intended recipient, can expand paired exchange by providing a "starting point" by facilitating incompatible pair, kidney transplants



Kidney Paired Donation Programs

- National Kidney Registry
- UNOS KPD Program
- Alliance for paired Donation
- Biologic TX
- Single Center programs



KPD: National Impact

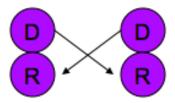
- KPD contributes ~ 15% total annual Living Donor Transplant volume
- Since 2014, gradual increase in overall volume
- In 2019, 1,114 of the 6,867 living donor transplants performed can be attributed to KPD
- In 2020, as with transplant across the board, there was a decrease in KPD transplants



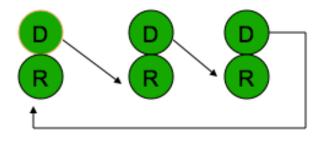
The Evolution of Paired Exchange

Traditional Paired Exchange

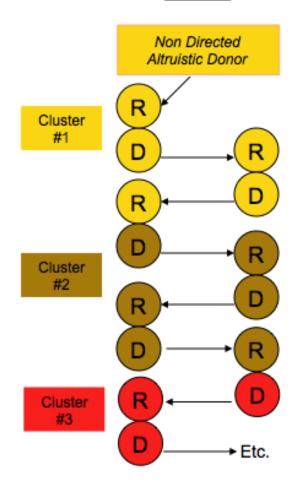
Two Pair Exchange



Three Pair Exchange



<u>Chains</u>

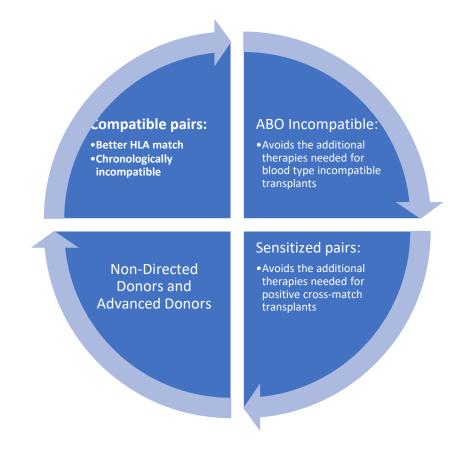




How does it work?



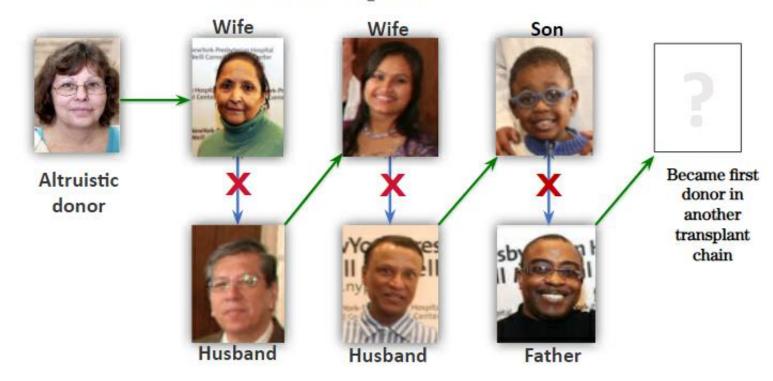
Who Enters KPD?





Never Ending Altruistic Donor Chain

Needs a transplant



Willing but incompatible donor



60 Lives, 30 Kidneys, All Linked



NYT, 2/18/12

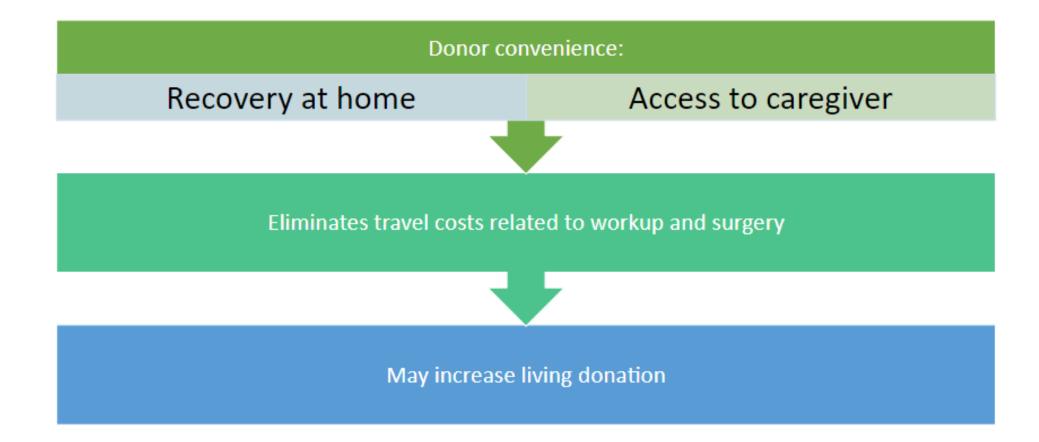
Remote Donation

Remote Kidney Donation allows someone who wants to donate a kidney to a friend or family member in a distant city without requiring the donor to travel to the transplant center.

Remote donation utilizes proven logistics systems pioneered in kidney swaps over the past decade to safely transport the kidney from the donor's local hospital to the distant transplant center.



Advantages





Voucher Donation

Voucher Types

Standard Voucher

 Voucher donor only name a single intended recipient, the intended recipient may need a kidney transplant within the year.

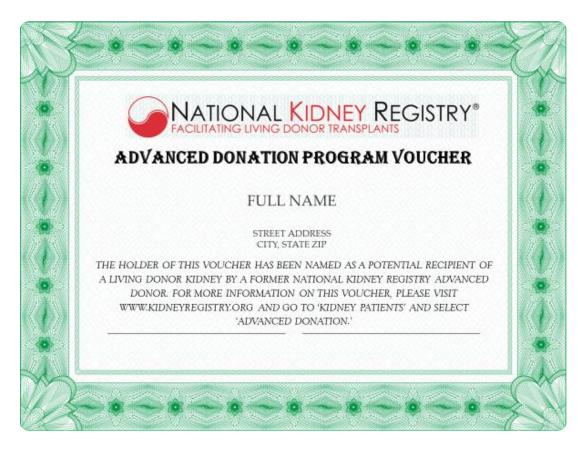
Family Voucher

- Family Voucher donor can name up to 5 family members, none of whom are expected to need kidney within the year.
- Donors who would choose to not donate because they may need to donate to a family member later are now provided that protection.

National Kidney Registry 2021







How best to help your transplant candidate:

Early engagement in the quest for a donor is critical

 Incompatibility is NOT a barrier to successful transplantation It is important for a transplant candidate's support team to come together and strategize about how to best communicate the need for a donated organ.

Assist the transplant candidate, through education, to overcome their fear of sharing their need.

Community level education to dispel misconceptions surrounding living donation and kidney paired donation may encourage donors to come forward who otherwise might not consider themselves acceptable candidates.

D'Alessandro T, Veale JL. Innovations in kidney paired donation transplantation. Curr Opin Organ Transplant. 2019 Aug; 24(4):429-433. doi: 10.1097/MOT.0000000000000669. PMID: 31192817.



Summary

- KPD provides an opportunity for incompatible pairs to receive a LD transplant
- Very highly sensitized recipient candidates are now realizing transplant success as a direct result of KPD.
- Affords compatible pairs an opportunity to receive a better matched kidney
- Voucher program overcomes the chronological incompatibility

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Thank You



Give thanks. Give life.

