Living Kidney Donation

Presented by Nebraska Medicine
Agenda

• Treatment options for end stage renal disease (ESRD)
• Living donor vs. deceased donor
• The multidisciplinary team
• The living donor surgery and risks
• Kidney transplant surgery and risks
• Kidney transplant outcomes
• Living donor options
• Required living donor follow-up
Treatment Choices for ESRD

- Hemodialysis
- Peritoneal dialysis
- Deceased donor kidney transplant
- Living related kidney transplant
- Living unrelated kidney transplant
What is the Best Option?
1, 5, and 10 Year Patient Survival Rates

Data from the USRDS 2014 Annual Data Report; 1-year data are from 2011, 5 year data are from 2007, and 10-year data are from 2002
1, 5 and 10 year Graft Survival Rates

Data from the USRDS 2014 Annual Data Report; 1-year data are from 2011, 5-year data from 2007, and 10-year data are from 2002.
Kidney Transplantation

- 16,000 transplants each year in the U.S.
- Over 120,000 people on the waiting list to receive a kidney
- The number of individuals needing a transplant is growing compared to the number of transplants being performed.
- There continues to be a shortage of organs
- Twenty two people die each day
- Patients may receive a kidney transplant from a deceased donor or a living donor

Living donor vs. Deceased donor

- The patient survival and graft survival is better with living kidney donation. In other words, patients who receive a living donor kidney transplant live longer and have healthier kidneys that last longer.
- The kidney is from a fit and healthy individual person who has undergone a rigorous medical evaluation.
- The surgery can happen when it is most convenient for the living donor and the recipient.
- The wait time for recipient to receive a kidney is less.
- The surgeries happen at the same time.
- The longer a person is on dialysis, the higher rate of medical complications. Living donation can happen sooner than waiting on a list therefore decreasing medical complications.
Living Donor Kidney Transplants (OPTN)

www.optn.transplant.hrsa.gov
Steps in the living donor evaluation
Diagnostic Testing

- Compatibility Testing
- Initial Labs
- Referral to Specialist if Needed
- Physical Exam by Physician
- Radiology and EKG Testing
- Cancer Screening
  - Colonoscopy
  - Mammo/Pap
  - PSA Blood Test
- ILDA Consult

Referral to Specialist if Needed

Physical Exam by Physician

Radiology and EKG Testing

Cancer Screening
- Colonoscopy
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ILDA Consult
Why a Multidisciplinary Approach?

What is the role of each team member
The Living Donor Team

- Independent Living donor Advocate
- Clinic Staff
- Nursing Coordinators & Staff
- Pharmacist & Dietitians
- Care partner
- Donor Nephrologists & Nurse Practitioners
- Transplant Surgeons
- Financial Coordinator
- Social Workers & Psychologists
- YOU

YOU Care partner

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- Transplant Surgeons
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The Nurse Coordinator

• Interviews the potential donor to assess motivation to donate
• Directs and coordinates the evaluation process
• Schedules the living donor surgery when it is convenient for the living donor
• Continues to be the living donors coordinator after donation
• Responsible for living donor follow up
The Social Worker

- Completes a psychosocial assessment to evaluate mental health, emotional well-being of the potential living donor
- Discuss the reasons why the donor wants to donate, and that is free from coercion and inducement
- Assess financial implications and time off work
- Assess to make sure that is a care partner is present to help the living donor with discharge
- Is present in the discharge planning process
The Psychologist

• Completes a psychosocial assessment to evaluate mental health, emotional well-being of the potential living donor
• To assure that the donor can give informed consent
• To discuss the reasons why the donor would like to donate
• To determine that the donor has the coping strategies in place to uphold the stress of donation
The Transplant Surgeon

• Interviews the potential donor to assess motivation to donate
• Reviews the risks of the operation both short term and long term
• Provides information regarding potential post donation outcomes
• Discusses the donor nephrectomy surgery
• Reviews donor test results and CTA studies
The Donor Nephrologist

- Interviews the potential donor to assess motivation to donate
- Completes a history and physical on the potential donor
- Discusses the long term risk associated with kidney donation
- Reviews all test results
The Independent Living Donor Advocate

- Protects the interests and well-being of the donor
- ILDA is completely separate from the care of the recipient
- Interviews the potential donor to assess motivation to donate
- Ensures that the donor understands the organ donation process and the short and long term risks of living donation
- Ensures that donor understands that they can say no at anytime and for whatever reason
- Ensures that the living donor know that there are other options for the recipient
- Ensures that the decision to donate is free from coercion and free from inducement
- Represents and advise the living donor throughout the process
The Entire Donor Team Responsibility

• Our top priority is you as a donor!
• Our responsibility as an entire team is to make sure it is safe for you to donate not only medically, but psychologically and emotionally.
• There is no medical benefit for a living donor to donate.
• We want to make sure it is the right decision for you!
• We want to make sure that your decision to donate is your independent decision and you are free of inducement or coercion.
• It is unlawful to receive any form of payment in exchange for being a donor and may be punishable up to five years in prison or a $50,000 fine.
Preoperative Phase

• Preoperative labs, including a final crossmatch, and serology testing
• Preoperative history and physical with the transplant team
• Sign of surgical and blood consents
• Pre anesthesia consult if indicated by history
Daily Bathing Decreases Infection

- All people have harmful germs or harmful bacteria on their body
- These germs and bacteria can cause infections after surgery
- You will be asked to take a shower at the time of admission for surgery
- You will be asked to bath daily following your surgery.
- Taking a shower prior to surgery and a bath daily following surgery CAN prevent infection
The donor surgery

• Laparoscopic Nephrectomy (left kidney removed)
  ▪ Two small incisions in the left lower quadrant and one midline incision or bikini incision, which the kidney is removed through
  ▪ Laparoscopic donors have been shown to require less analgesia, shorter length of stay in hospital, and faster return to normal activity; the average hospital stay is 2 days

• Open Nephrectomy (rarely used - for right kidney removal)
  ▪ Flank incision using the retroperitoneal approach
  ▪ Technique is safe with low mortality, acceptable risk of peri-operative complications, preservation of graft function
  ▪ Larger incision may result in significant discomfort and prolonged recovery
Post-operative course

• Admit to SOTU
• Will have IV fluids, pain management, Foley catheter overnight
• Day 0, walk 3 x day, decrease IV fluids, start oral pain medications, discontinue Foley catheter and advance diet as tolerated
• Typically discharged 2 days after surgery with pain medications and bowel regimen
• Follow-up with surgeon 2 weeks post-donation
• Lifting restriction of less than 10 pounds for 6 weeks
• No driving while on pain medications
Perioperative risks

- Small bowel obstruction
- Shoulder pain
- Bleeding
- Pneumonia
- Urinary tract infection
- Wound infection
- Hernia
- Blood clots/pulmonary embolism
- Death: low risk 3.1 per 10,000 donors in national studies
- Allergic reactions to meds
Life After Donation

• You will be seen by the transplant team two weeks after donation.
• Make sure that you maintain good long term medical follow up with your PCP
• We ask that you avoid NSAIDS (example Ibuprofen/Aleve products)
• Women of childbearing age may get pregnant after donation, we ask that you wait one year after donation and follow closely with OBGYN as you are at a little bit higher risk of having high blood pressure in pregnancy
Life After Donation

- Kidney function usually stabilizes 70-75% of your previous function a few months after donation.
- We ask that you maintain a healthy weight and a healthy life style (for example avoidance of smoking, etc.)
- Don’t hesitate to call at anytime with questions regarding life after donation. We are always available for your resource.
Living Donor Follow Up

• Important for yearly follow up with your PCP for your benefit
• UNOS requires all transplant programs submit data on all living donors at 6 months, 1 year and 2 years
• A living donor follow up form is sent to all our living donors at 6 months, 1 year and 2 years and reminder to schedule their appointment
• All donors sign and agree prior to donation to follow up with their primary care physician at 6 months, 1 year and 2 years post-donation
• A functional status questionnaire is filled out by the living donor
• Follow-up data by primary care physician include urine analysis for protein, blood creatinine, current weight, and blood pressure
Financial Implications

- The living donor testing, the surgery and the two week post donation follow up is covered under the recipient insurance.
- The 6-month, 1-year and 2-year follow-up is the living donor’s responsibility.
- Donor travel and lodging expenses are not covered. There are programs that you may be eligible for (NLDAC) to offset the cost. Discuss with your coordinator if you are interested.
- All living donors need to have health insurance for your safety and protection.
The Kidney Transplant Surgery
Risk and Outcomes
Recipient Surgery

• The kidney transplant surgery is about 2 to 3 hours.
• The kidney is attached in the front of body, near the bladder.
• The recipient will stay on Clarkson’s 5th floor which is our designated SOTU floor.
• Our average hospital stay after transplant is three to five days.
• The recipient will be up and moving the day of surgery.
Transplant Outcomes

For updated Scientific Registry for Transplant Recipients (SRTR) data visit us online at: www.srtr.org
Living Donor Kidney Options

**Donor is a match**
- Blood type and tissue type match
- Can be related or unrelated donor

**Proceed to donor evaluation**

**Donor is not a match**
- Blood type and/or tissue type not matching

**Internal exchange KPD Find another donor**
Living Donor Options at Nebraska Medicine

- Direct donation
- Non-directed donation
- Internal exchange
- ABO incompatible
- Kidney Paired Donation
Kidney Exchange Program

Paired Donation

Pair 1
Donor 1 → not compatible → Recipient 1
Donor 1 → compatible → Pair 2

Pair 2
Donor 2 → compatible → Recipient 2
Donor 2 → not compatible
Blood Type Incompatibility

• All potential donors will be considered regardless of blood type
• Recipient may receive treatments before and after transplant to decrease the risk of rejection
• No change in treatment or surgery for the donor
Quiz

Please circle one.

True / False  Donor may opt out at any time.

True / False  Most common complication of the donor surgery is a hernia.

True / False  Lifting restriction of less than 10 lbs., for 6 weeks after surgery.

True / False  It is okay to take Ibuprofen frequently after donating a kidney.

True / False  The donor needs a primary care physician.
Questions?