

**Living Donor
Transplantation
Education**

**Inova Transplant
Center**

Living Donor Coordinator

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The Transplant Center Team: *A Patient Centered Multidisciplinary Approach*

- **Transplant surgeons**
- **Nephrologist**
- **Living donor coordinator**
- **Nurses**
- **Social workers**
- **Psychiatrist**
- **Living donor advocate**
- **Psychiatrist**
- **Dietician**
- **Most important - You**



Transplant Physician Team



Transplant Surgeons

- **Johann Jonsson, M.D.,
F.A.C.S.**



- **James Piper, M.D.**



- **Eric Siskind, M.D.**



Transplant Nephrologist

- **Ravinder Wali, M.D.**



- Age 18 or over
- Good physical health – no uncontrolled high blood pressure, diabetes, heart disease, recent cancer, obesity (BMI >35).
- Stable emotional health.

Blood relatives

- brothers/sisters
- parents
- children
- cousins
- aunts/uncles

Unrelated

- spouses
- close friends
- co-workers
- church members
- in-laws

Better success rate

- ✓ In most cases, the organ does not have to be transported from one hospital to another and is in better condition when it is transplanted. The kidney has a tendency to function better and last longer over time.

Shorter waiting time

- ✓ Average waiting time for a deceased donor is 4 to 8 years. Each year, 1 out of 20 people waiting for a new kidney dies from kidney disease or its complications while on dialysis.

More time to prepare

- ✓ Deceased donor kidney transplants are unscheduled – they happen anytime day or night. With a living donor, the surgery is scheduled ahead of time. This makes it easier to mentally and physically prepare for surgery.

- You have the right to stop the evaluation process at any time
- You have the right to change your mind about donating at any time before the surgery
- HIPAA protects your personal medical health information from being shared with anyone outside of your medical team including the recipient, unless specific permission is given by you.

Overview of the Donation Process



- ❑ Referral to Inova Transplant Center
- ❑ Baseline screen performed by Living Donor Coordinator
 - Blood work – compatibility
 - General Health Status
 - Findings may need to be reported to appropriate state agencies
- ❑ Team Evaluation – Transplant coordinator, Social Worker, Living Donor Advocate & Dietitian
- ❑ Transplant surgeon consult
- ❑ Collaborative practice meeting case presentation
- ❑ Hospitalization for donation
- ❑ Follow up care: Transplant and PCP

For all potential donors:

- **This is a surgery that has NO medical benefit to you**
 - There are risk associated with the surgery
 - There is a 25-35% reduction of kidney function following donation
 - Risk for chronic kidney disease
- **There are alternative treatment including deceased donor**
 - There is chance the recipient could receive a deceased donor organ before your evaluation is completed or the transplant completed.
- There may be risk factors to the recipient that the health care team may not be able to share with you.
- You may not be selected for a variety of reasons. You are free to see other center who may use different selection criteria.

- **The sale or purchase of human organs is a federal crime.**
- It is unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation.
- It is federal crime for any person to knowingly acquire, obtain or otherwise transfer any human organ for money or anything of value

Risks Associated with Donation



- Your risk of developing chronic kidney disease (CKD) or end stage renal disease (ESRD) is similar to the general population
- Factors to consider
 - CKD usually occurs between 40-50 years of age
 - ESRD usually occurs after the age of 60
 - Treatment of ESRD includes dialysis
 - Your current status and evaluation can not predict your life time risk of CKD or ESRD
 - As a donor, you maybe at risk CKD if you sustain injury to your remaining single kidney – the disease may progress more rapidly with only one kidney

- “Of the 79,070 individuals who were living kidney donors from 1999 through 2011, at least 24 have been listed for a kidney transplant.” –UNOS.org
- “However, the medical problems that caused these donors to be listed for transplant may not be connected to the donation.”-UNOS.org
- ****This total only captures data on transplant candidates who are known to the OPTN/UNOS to be previous donors.-UNOS.org***

- **Risk associated with evaluation**
 - Allergic reaction
 - Reportable conditions
 - Serious medical condition
 - Adverse genetic findings
 - Discovery of condition that may require additional treatment/evaluation at donor expense
- **Risk after donation**
 - Medical/Surgical
 - Psychosocial
 - Financial
 - National Living Donor Assistance Center 703-414-1600
 - May be able to provide assistance with meals, lodging, travel, and other non-medical concerns related to evaluation and surgery.

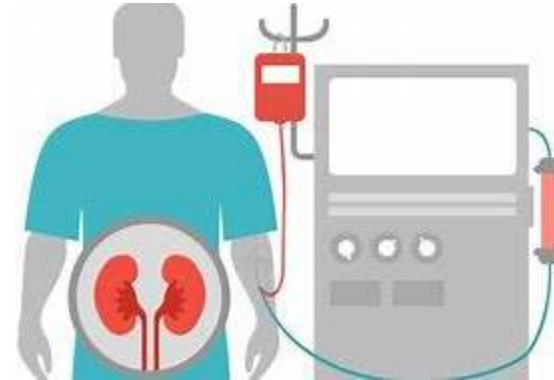
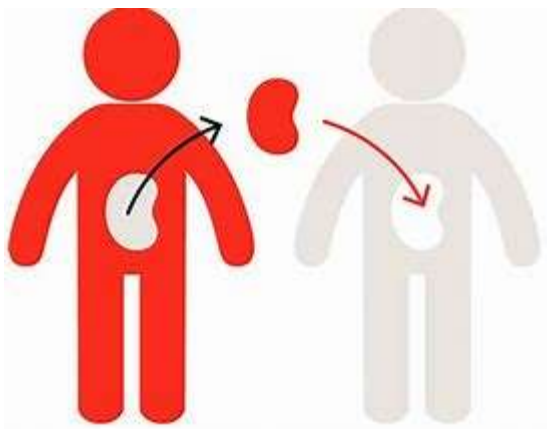
Risks Associated with Donation Continued



- Cancer
- Obesity (Body mass index >35)
- Diabetes mellitus
- Significant Hypertension
- Protein in urine (proteinuria)
- Pyuria (infection)
- Chronic or recurrent nephrolithiasis (kidney stone)
- Asymptomatic microscopic hematuria (blood in urine)
- Active Renal disease
- Infection – viral, bacterial, fungal, parasite infection
- Drug, alcohol abuse
- Living donor advocate recommendation that patient not be accepted for live donation

Sources of Kidneys for Transplant

- Living donors
- Deceased donors
- Paired exchange
- Domino exchange
- Alternatives to Transplant
- Dialysis



➤ Hemo or peritoneal

- Blood type
- HLA tissue matching
- Crossmatch



Blood Type Compatibility

Recipient	Donor
O	O
A	A, O
B	B, O
AB	A, B, AB, O

* Rh Factor (+/-) does not matter for Kidney Transplant

HLA Tissue Typing

- *HLA-Protein found on most cells of the body and used to match with a donor for organ transplant.*
- Tissue typing is blood test is to determine the tissue type of the patient and the potential donor to see how well they match.
- Each person's tissues (except identical twins) are usually different from everyone else's.

A better match will lead to a more successful transplant over a longer period of time.

- Recipient & donor blood cells are mixed together.
- Checks for a reaction of the recipient cells against the donor cells.

Positive reaction – Incompatible/no transplant

Negative reaction – Compatible/ok to transplant



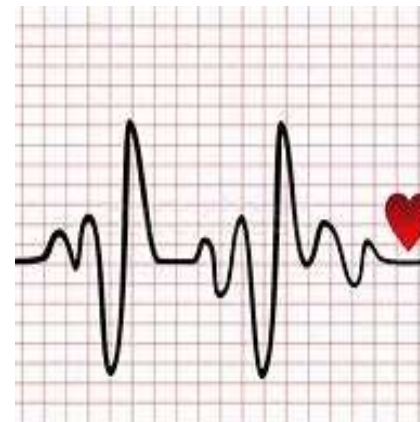
Living Donor Evaluation

- ❑ Donors must have separate, individual appointments with the Living Donor Transplant Coordinator
- ❑ Must complete the donor medical history before the appointment
- ❑ Arrangements can be made for testing of out of town donors
- ❑ Visa request letters can be written for donor who live outside of The United States
- ❑ Testing and surgery paid for by the recipient's insurance



Waiting for a Transplant

- Blood typing
- Blood pressure checks
- Blood chemistry & urine tests
- Chest x-ray
- EKG
- Abdominal CT scan
- Social worker evaluation
- Living donor advocate evaluation
- Dietician evaluation
- Nephrology evaluation
- Surgeon evaluation

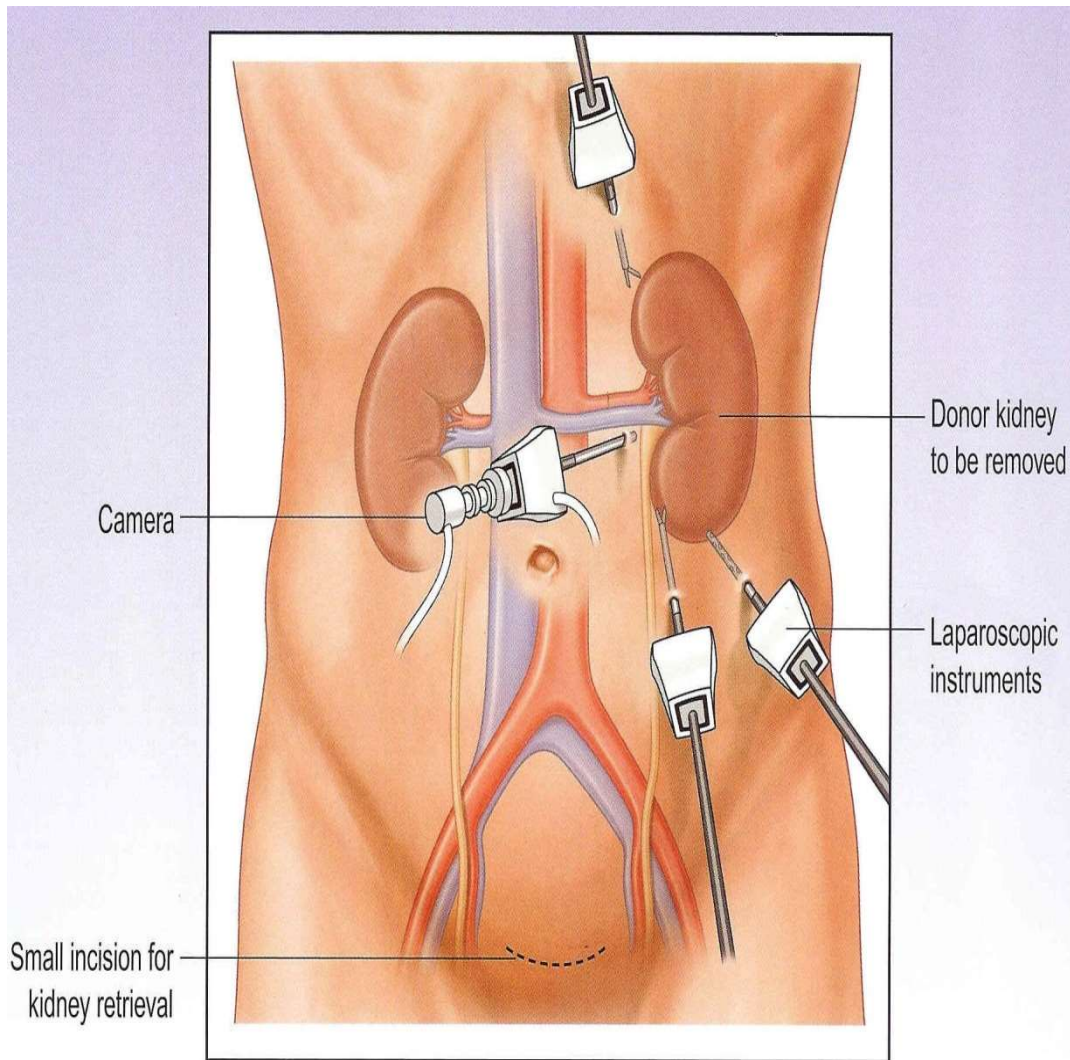


Laparoscopic Living Donor Nephrectomy



- 3-5 small abdominal incisions using special instruments/scopes to remove the kidney
- Advantages of this procedure:
 - less scarring
 - possibly less pain
 - shorter recovery time
- Most nephrectomies are done using this procedure; however, this is determined by the CT scan results and the transplant surgeon assessment

Laparoscopic Living Donor Nephrectomy



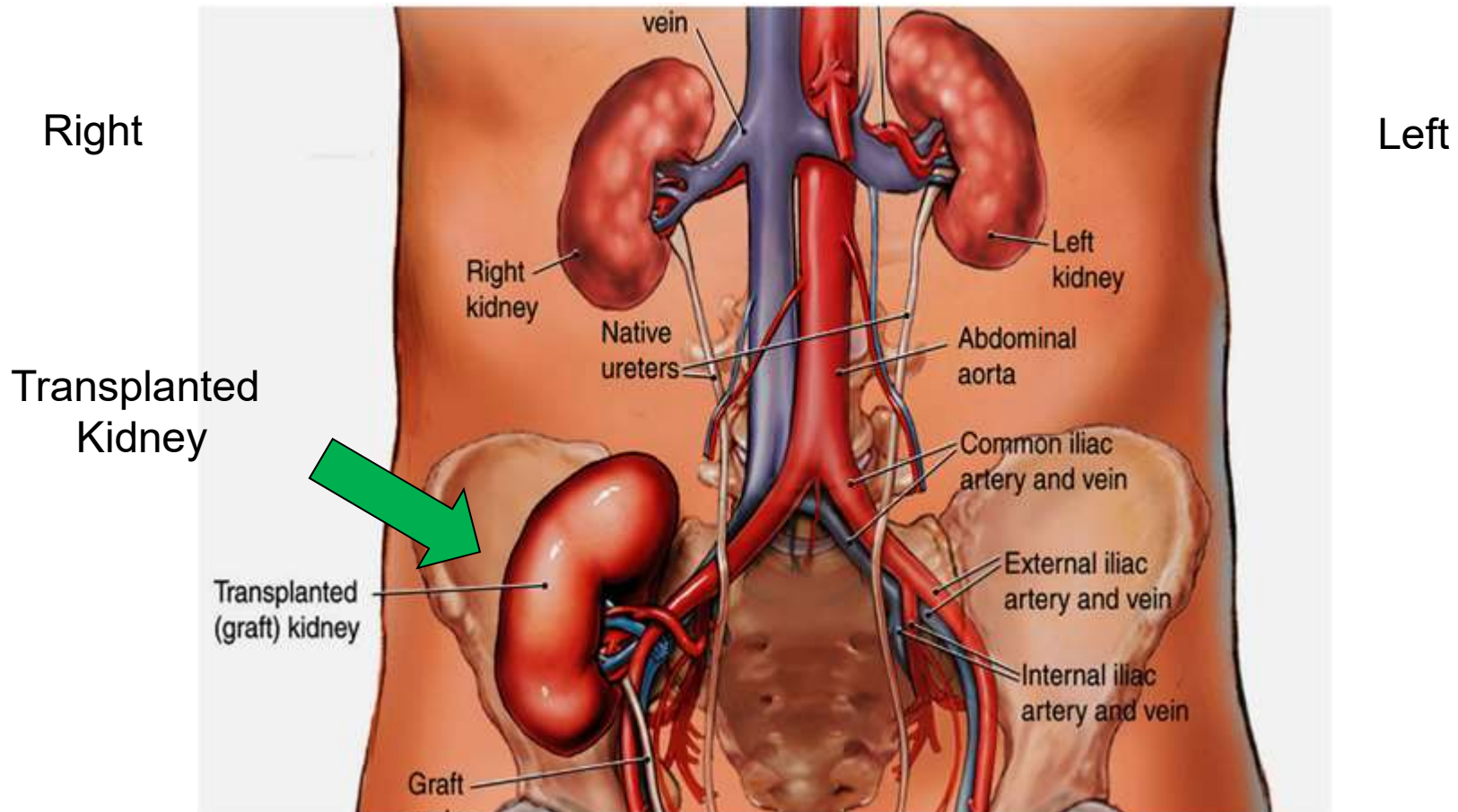
Living Donor Nephrectomy

- Done under general anesthesia
- Surgery takes 3-4 hours
- Usually requires no blood transfusions
- Length of hospital stay 1-2 days
- Recuperation varies from 4-6 weeks
- Complications rare – incision pain or infection, urinary tract infection, constipation, blood clots, or pneumonia



- The surgery is scheduled when works for both the donor and the recipient
- Both the donor and the recipient arrive to the hospital the morning of surgery
 - Seen in the pre-op area
- Surgical Procedure
- Recovery
 - Surgical tower: 10th or 11th floor
 - Patient confidentiality

Kidney Transplant



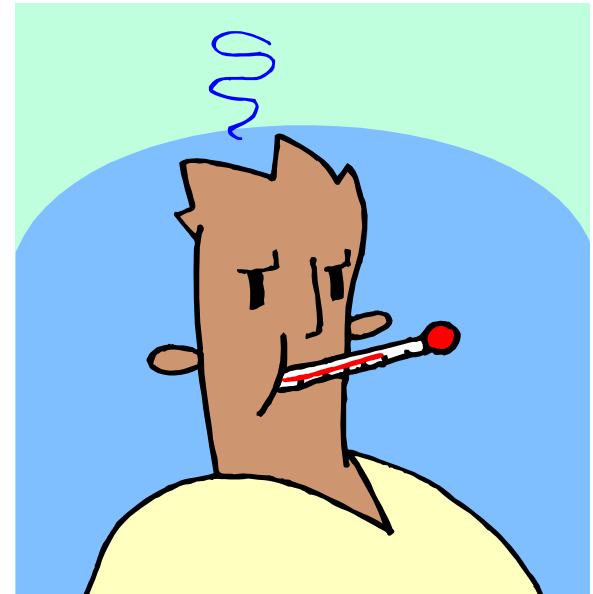
Surgery: Potential Complications

- Technical
- Bleeding
- Infection
- Blood clots & Pneumonia
- Risk of anesthesia



YOU WILL BE ASKED TO MONITOR FOR THE FOLLOWING:

- **Temperature**
- **Appearance of wound**
- **Leg pain or swelling**
- **Severe abdominal pain**
- **Unable to have bowel movement**
- **Blood in your urine**



- Visits at the transplant center post donation
 - 10 – 14 days following surgery
 - 6 months
 - 1 year
 - 2 year
 - This information is reported to UNOS

- Important to monitor for complications post donation
 - Lab work
 - Physical examination
 - Nutritional needs
 - Maintain hydration

Follow Up Care Continued



- Avoid pregnancy for the first year following donation
- Take your time for recovery and return to work
- Follow up with Transplant Center
- Follow up with Primary Care Physician
 - Lab test
 - Blood pressure monitoring
- Avoid specific medications long term: non-steroidal medications

- Any infectious disease or malignancy that is discovered two years after donation should be reported
 - May impact recipient care
 - May need to be reported to local, state, and/or federal authorities
 - Will be disclosed to the recipients transplant center
 - Reported through the OPTN Improving Patient Safety Portal
 - All need to be aware of your condition and impact to the recipient

- Tell every doctor you have one kidney!
 - Includes your primary, dentist, urgent care, ER, OBGYN etc.
 - Check with PCP prior to starting new meds
- Stay hydrated
- Check your blood pressure
- Avoid chronic use of specific medications



Long Term Care Continued



- Establish relationship with Primary Care Physician
- Annual evaluations including lab work to assess renal function and blood pressure
- Maintain health insurance
- Maintain healthy life style and control weight
- Health conditions that occur over the next two years may be reported to state agencies, UNOS and recipient (cancer or infections)

www.inova.org

www.unos.org

www.wrtc.org

www.niddk.gov