



Transplant: Your best option

Leonardo Riella, MD, PhD

*Medical Director, Massachusetts
General Hospital Transplant Center*



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Goals of the talk



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Why should kidney patients consider transplant?



Importance of timing of referral to transplant and the waitlist



How can kidney patients get a deceased kidney earlier?

Kidney disease



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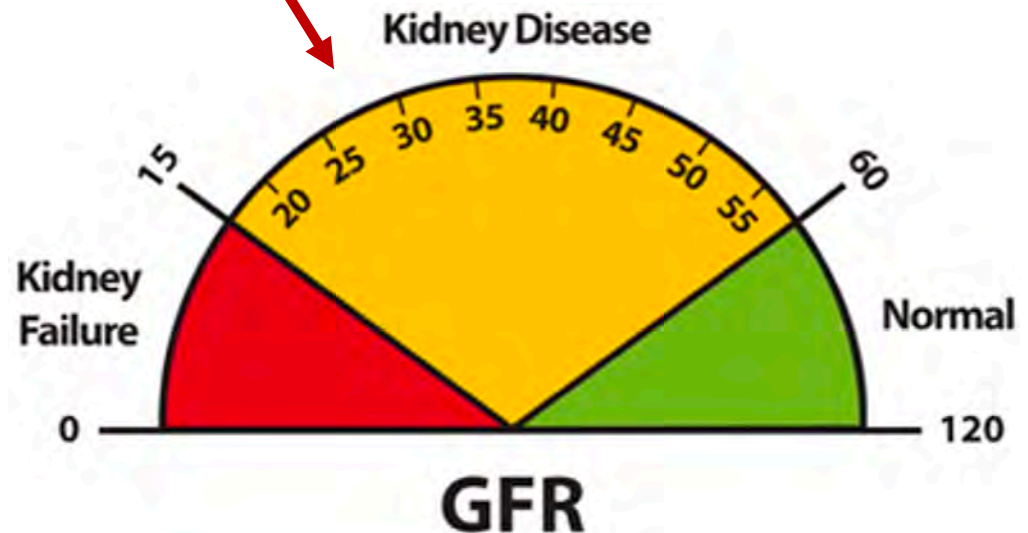
Often has no symptoms until it is very far along.



Referred for transplant
 $\text{GFR} < 25 \text{ ml/min}$

Blood test

- Creatinine
 - GFR (estimates kidney filtration)



Kidney failure treatment options

1. Kidney transplantation
2. Dialysis (hemodialysis or peritoneal dialysis)
3. Conservative treatment (few patients with limited life expectancy)

Start thinking about treatment options at least 1 year prior!

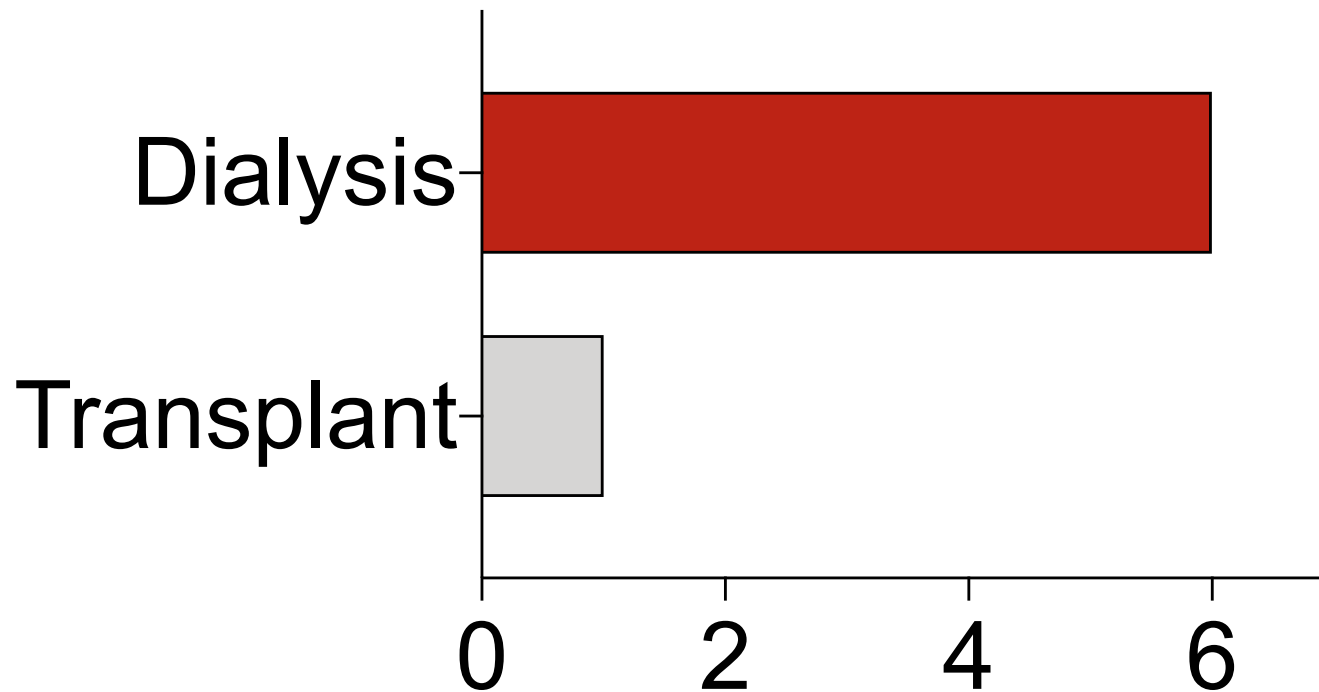


Main problem about dialysis



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Risk of dying



6-fold ↑ risk of
dying on dialysis

Estimation of 3-year mortality

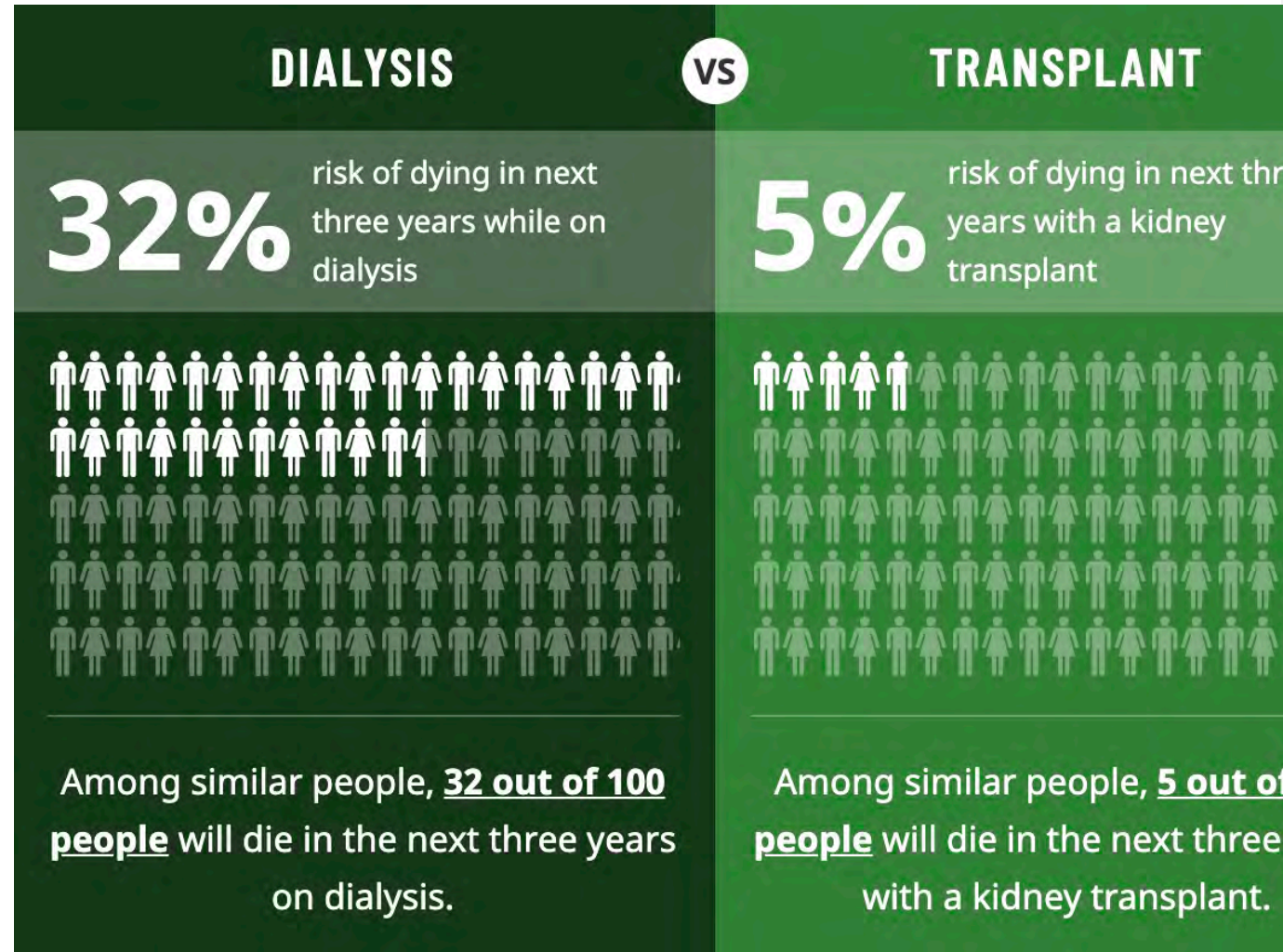


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Example:

60 year-old male
Started on dialysis
less 6 months ago

↑ risk of dying
than many
cancers



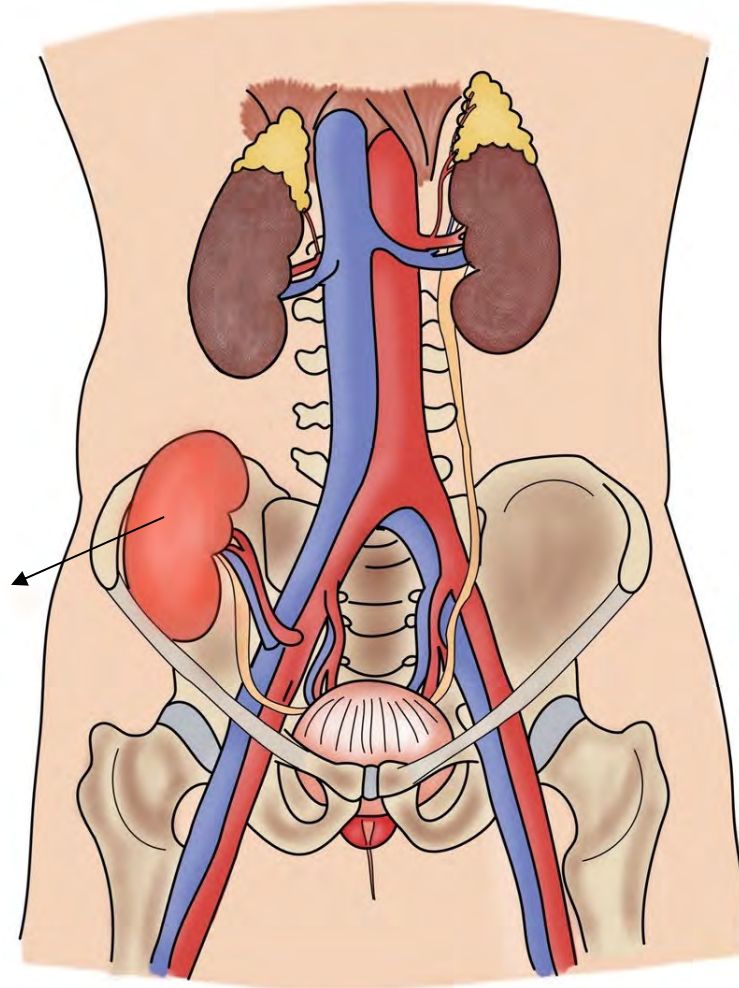
Kidney transplantation



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- Operation that places a healthy kidney from another person into your body (high-volume center).
- It is a treatment, not a cure for kidney disease
- You are required to take lifelong medications to prevent your body from rejecting the kidneys

Transplanted kidney



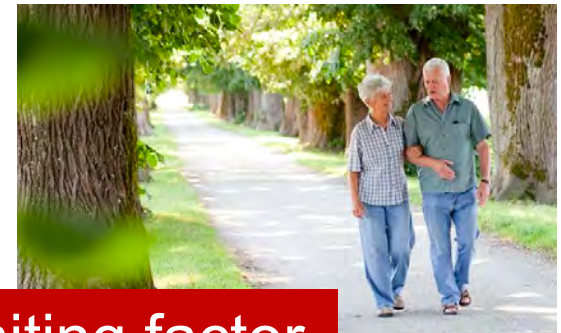
Why choose transplant vs dialysis?

1. You will live longer and better with transplant
2. Greater independence and ability to work
3. Fewer dietary and travel restrictions



Who can receive a transplant?

1. Healthy and able to tolerate a major surgery
2. No life-threatening health problems
3. No infection, cancer or drug abuse
4. Support system in place



Age is not a limiting factor

Types of kidney transplants



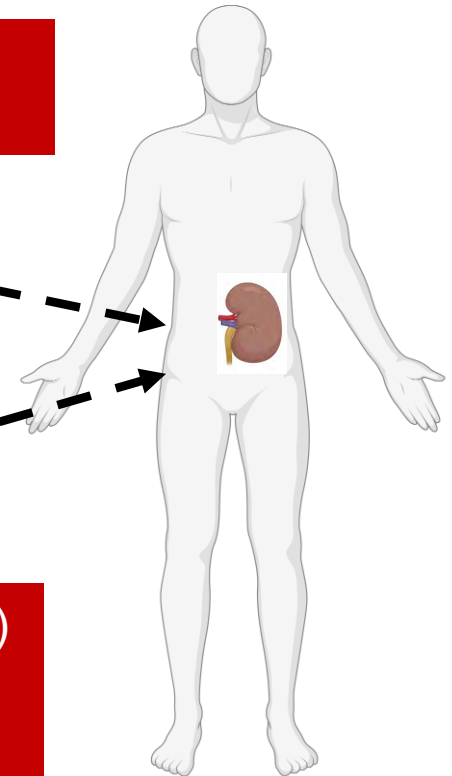
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Deceased donors (65%)

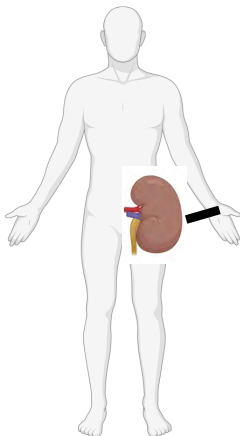


Not available immediately
Waiting time ~4-6 years

Recipient



Living donors (35%)



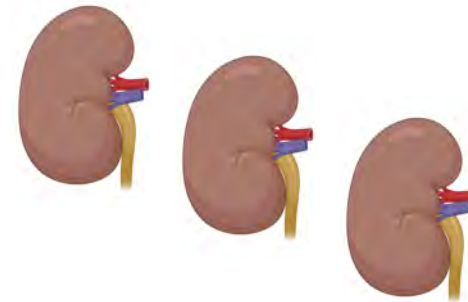
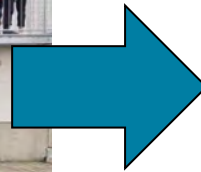
Only way to avoid dialysis (earlier)
From family or friend
↓ Risk of rejection
Last longer

Deceased kidney donor



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Waiting-list



>100,000 patients

Only ~12,000 kidneys/year

Just not enough kidneys....

How are kidneys allocated?

According to points (UNOS - computerized system):

- **Waiting time (1 year ~1 point)** since listing or dialysis initiation
- Extra-points for sensitization (difficulty to find a match donor)



Zero antigen match kidney (near perfect match):

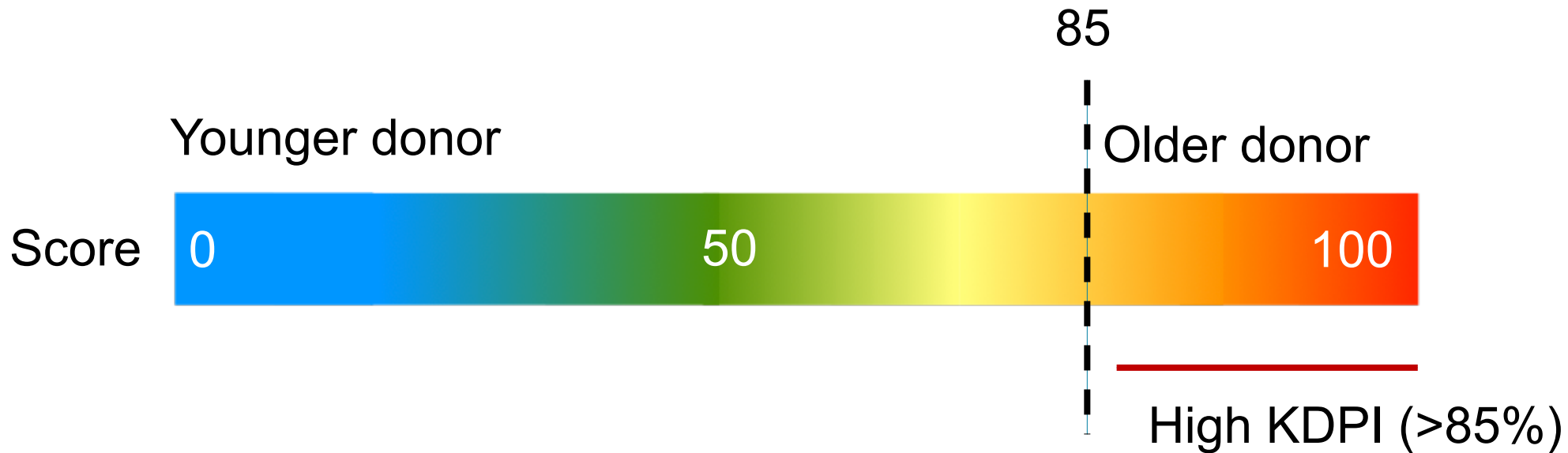


Waiting time for a
deceased kidney is
4-6 years

Not all kidneys are the same

Kidney Donor Profile Index (KDPI)

- Score given to kidneys according to 10 donor characteristics including age.



Maximizing your chance of getting a kidney



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Accepting higher KDPI kidneys (>85%)



Accepting increased-risk kidneys

- Kidneys from donors with high risk behaviors such as IV drug use, multiple sexual partners or time in prison.
- Risk of transmission of infections is below 1 in 1,000 (routine donor testing for hepatitis virus and HIV)

Kucirka et al. Am J Transp 2011



30% of donors in New England!
Increased-risk kidneys are better quality kidneys
(younger donors)
Shorten your waiting time on dialysis by 1-2 years

How are candidates evaluated?



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Initial visit:

Do you qualify for kidney transplant listing?

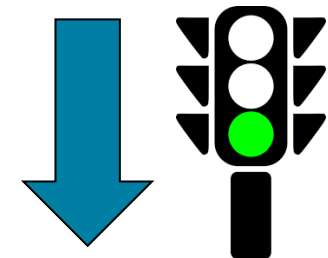
Evaluation



- ✓ multidisciplinary transplant team
- ✓ general medical screening tests

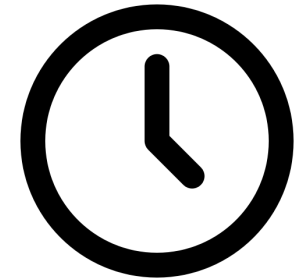
After Initial visit:

Team will determine
if transplant is right
for you



Listed for transplant

Readiness evaluation:



- Occurs when your estimated transplant date is ~12 months away
- To determine you are healthy enough to actually get transplant
- Extensive testing performed: cardiac echo, stress and/or cath, CT scans, ultrasound, MRA, repeat blood tests, additional consultations such cardiology, psychiatry, etc.

- Start early to think about treatment options
- Transplant is associated with longer and better quality of life than dialysis
- Living donation is the best transplant option
- To ↓ your wait-time, consider high KDPI and increased-risk kidney donors.

Thank You!

Leonardo V Riella, MD, PhD
lriella@mgh.harvard.edu (email)
@LVRIella (twitter)

www.massgeneral.org/transplant

