

Treatment Options

Dialysis and Transplant

Education #3

End Stage Renal Disease (ESRD)

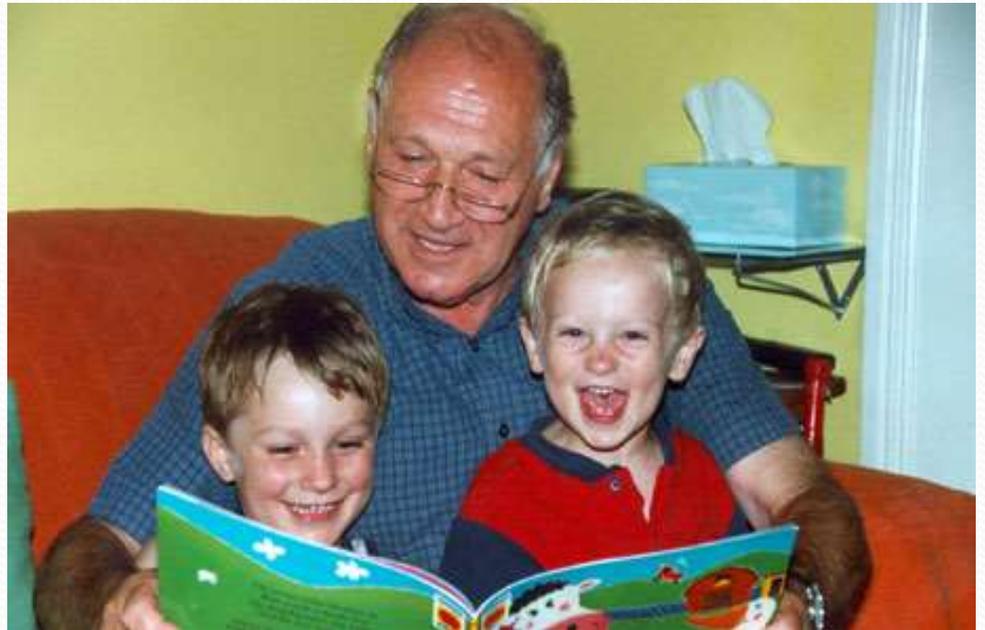
- Total or nearly total permanent kidney failure is called ESRD
- Symptoms of decreased kidney function typically begin when GFR < 20 ml/min.
- Symptoms result from the body filling with extra water and waste; this is called UREMIA
- Common symptoms are decreased appetite, nausea, vomiting, fatigue, swelling in legs/hands, shortness of breath, difficulty sleeping, itching, and confusion

ESRD

- Untreated uremia will lead to seizures, coma and death
- In order to continue living after your kidneys stop working, you will need to get a kidney transplant or start dialysis

Think about your lifestyle

- What is important to me?
- What am I not willing to give up?
- Work, children/grandchildren, hobbies, travel?



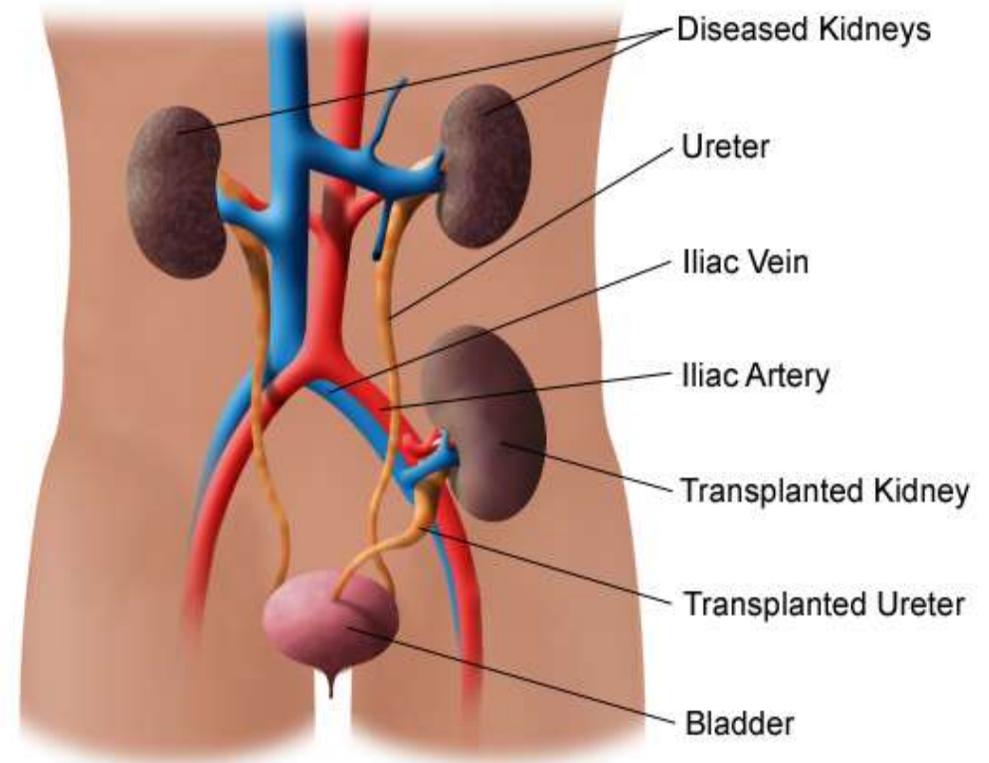
Kidney Transplant

- A donated kidney can come from an anonymous donor who has died, or from a living person
 - Family or friends
- The kidney must be a good match for you
- You will have to take anti-rejection drugs to keep your body from rejecting the new kidney
- Kidneys from living donors or related donors have the best match success and less rejection risks
- Kidneys from unrelated people also have a long survival rates
- You can be placed on the transplant list once your GFR is 20 or less
- Each center has different requirements on age, weight hepatitis, HIV status

Transplant

- Pre-emptive transplant means to have a kidney transplant done before you need to start dialysis
- It is possible to be on more than one kidney transplant list

Example of a Kidney Transplant



Transplant

- There are over 100,000 people in the U.S. waiting for a kidney transplant (2016)
- About 17,000 kidney transplants are done each year (2014)
- There are 400,000 people currently on dialysis
- A living donor kidney can last usually 12-20 years
- A deceased donor kidney can last usually 8-12 years
- Preemptive kidney transplant people live an average of 10-15 years longer, than if they had stayed on dialysis

Advantages of Kidney Transplant

- Longer improved quality of life
- Easier to work, study, travel, exercise and remain active
- Fewer restrictions (diet, fluid, certain medications)
- Better energy and fewer hospital admissions
- Better control of chronic kidney disease
- Freedom from dialysis routine
- Do you have a living donor? Have you asked?

Disadvantage of Transplant

- Out-of-pocket costs can be very high
- Surgery has risks
- Rejection of the kidney is always a risk
- Medication must be taken for as long as you have the transplant—no days off
- Medications have side effects
- Anti-rejection medications increase the risk for diabetes, infection and some cancers
- You may need another transplant or dialysis



**Tell me what you know
about dialysis**

What is dialysis?

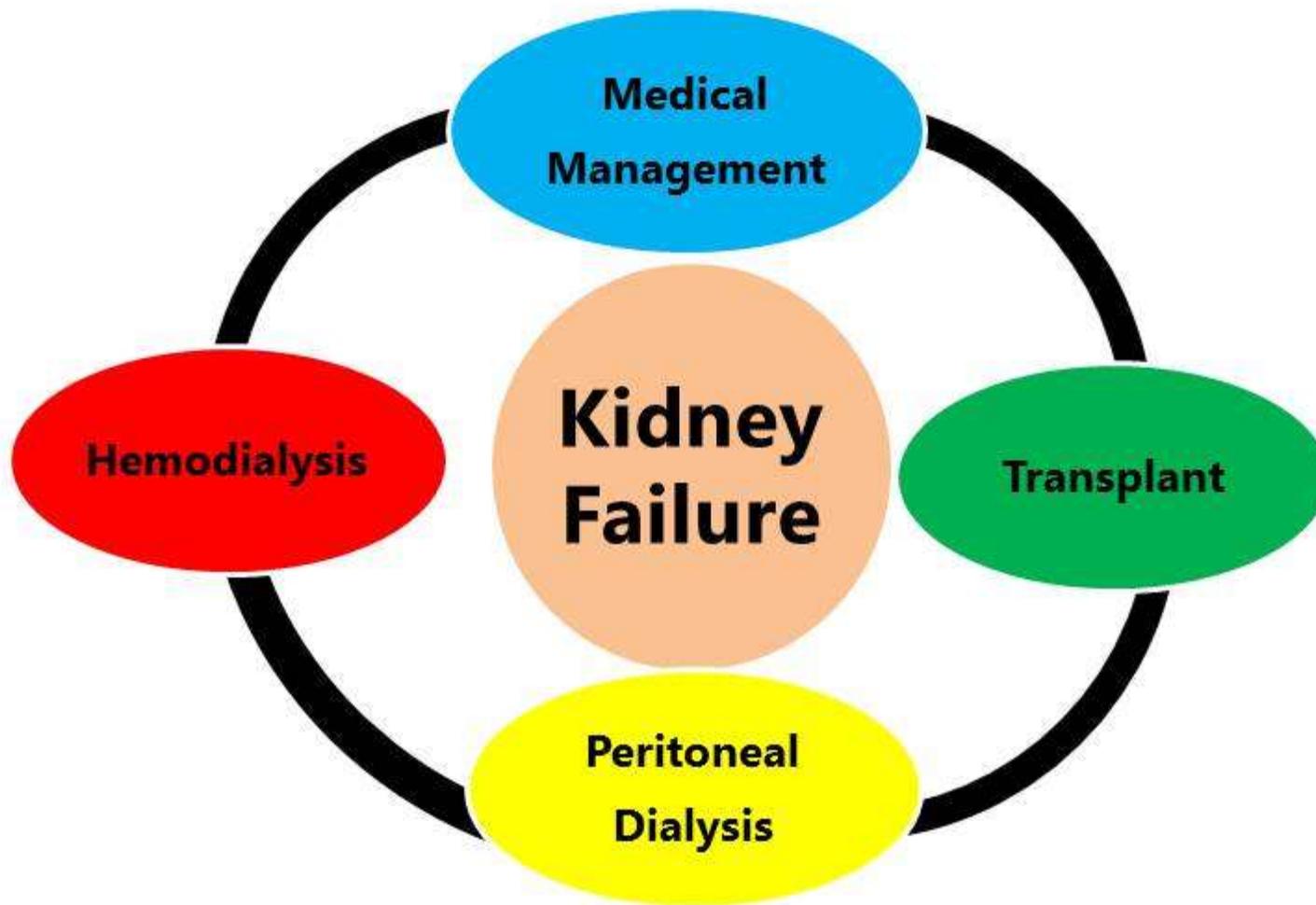
- A treatment option for kidney failure
- Does **SOME** of the work of healthy kidneys
 - Removes waste from your blood
 - Removes flood from your blood
 - Keep body's chemicals balanced
- Must be done for the rest of your life unless you have a kidney transplant or decide to stop treatment
- It is a form of life support. It **DOES NOT** cure kidney disease

With dialysis you can...

- Work
- Travel
- Go to school
- Care for your family
- Spend quality time with friends and family
- Enjoy activities and hobbies



Treatment for Kidney Failure



Peritoneal dialysis or Hemodialysis?

Peritoneal (PD)

- Uses the peritoneal lining to filter the blood
- A fluid, called dialysate, is put into your abdomen through a catheter
- This captures the waste from the blood and puts into the dialysis solution
- The solution is then drained from the body
- PD is done daily at home, often while you sleep

Hemodialysis (HD)

- Uses a special filter called a dialyzer that works like an artificial kidney to clean your blood
- Extra waste, salt and water are removed from your body
- Clean blood is returned to your body
- You can do hemodialysis in a dialysis clinic or at home
- HD is done 3-5 days/week, and can be done in clinic while you sleep

There are two main types of Home Dialysis:

Home hemodialysis:

Home hemodialysis uses a dialysis machine to clean the blood. The patient's blood flows from his or her vascular access through a dialysis machine to be cleansed of extra waste and fluids and sent back into the body.

Peritoneal dialysis:

Peritoneal dialysis uses the thin membrane, called the peritoneum, which lines the abdomen to perform dialysis treatments. A cleansing fluid is put into the patient's abdomen through a small, flexible tube called a PD catheter



- Patients are trained by medical professionals to do dialysis treatments at home
- Training is conducted at a dialysis center and takes from two to eight weeks
- Home dialysis patients are able to perform their dialysis treatments at home where they are most comfortable

- Home dialysis patients dialyze more frequently than in-center patients
- The more frequent treatments get blood cleaner and leave patients feeling better
- Required to attend monthly appointments to see your Nephrologist or Advanced Practice RN, dietician, social worker, and home dialysis RN's



Peritoneal dialysis (PD)

- Takes place inside your own body
- Uses your own peritoneum—a natural membrane that covers the abdominal organs and abdominal wall
- Membrane acts as a filter to allow toxins and fluid to be filtered out of the blood
- Requires a PD catheter into the peritoneal cavity
- Dialysate flows into your abdomen and sits, this is called dwell time
- Fluid is then drained from your abdomen and the process begins again

Peritoneal dialysis (PD)

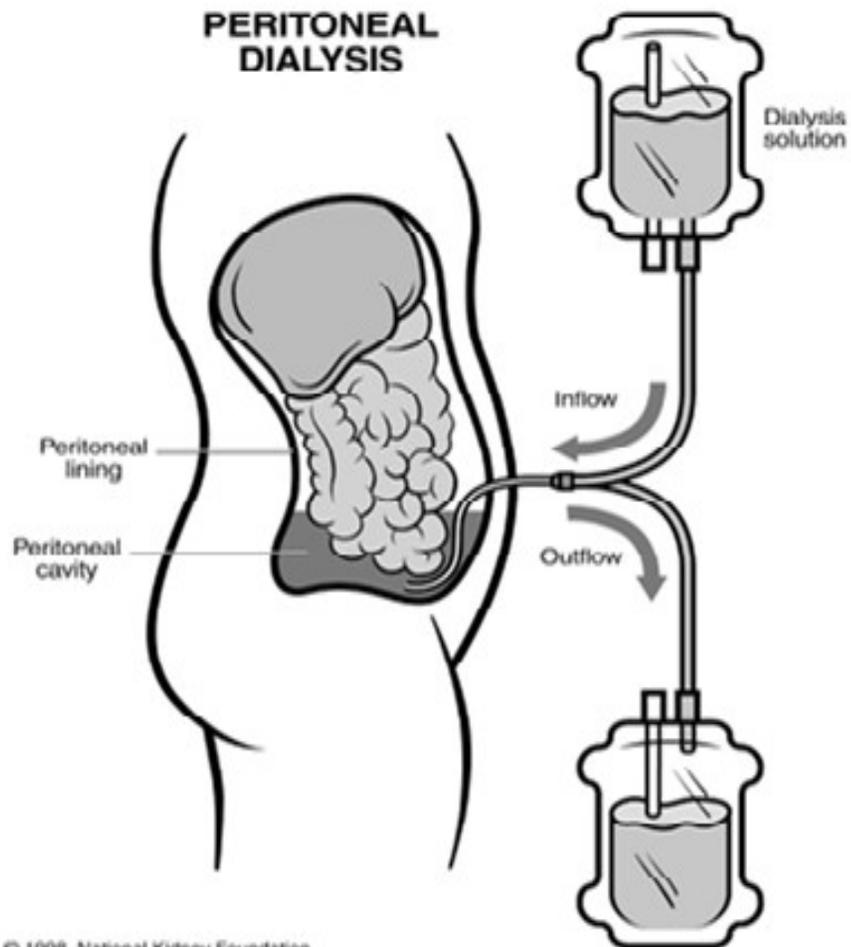
Pros

- Blood is cleaned every day
- Flexible schedule with independence
- NO partner needed
- Usually done while asleep
- No needles
- Portable, easy to travel with
- Better blood pressure control
- Prolongs remaining kidney function
- Minimal recovery time
- Survival benefit vs HD

Cons

- Not indicated with history of hernias or multiple abdominal surgeries
- Will increase insulin needs
- May need to do an extra exchange during the day
- Requires insertion of permanent catheter
- Must be very clean and careful to reduce the risk of infection
- Storage space is needed for home supplies

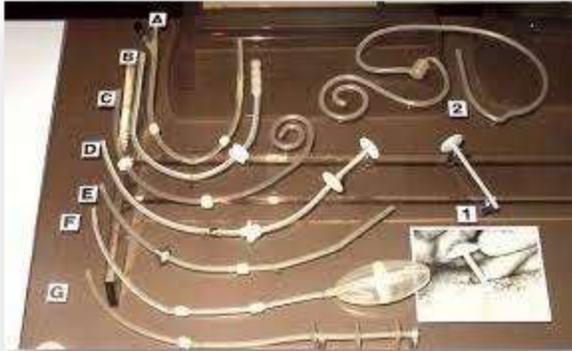
How does PD work?



Exchanges:

- Fill
- Dwell
- Drain

PD Supplies



Home Hemodialysis

- Requires a partner and training
- Training takes place by nurses/technicians for 4-6 weeks with your partner
- Dialyze 5 times a week for 2-3 hours, you pick your days
- Responsible for setting up and cleaning your machine
- Equipment and supplies are sent to your home
- Learn in training how to give your own IV medications and draw your blood from the machine for monthly labs

Why or Why not choose home-hemo?

Pros

- At home on your own schedule
- Control over the 4-5 days you want treatment
- No traveling to dialysis clinics
- Control over your treatment and life = independence
- Help is always available by phone to a nurse, dietician or social worker

Cons

- You and your partner have to have training for several weeks
- Need room for equipment and supplies
- Have to call EMS for emergency help
- Partner must be present to help with treatments
- Home must have plumbing and electricity

In-Center Hemodialysis

- Blood is filtered *outside* of your body
 - Blood flows through tubes to a filter on dialysis machine
 - Then is pumped back into body after it's filtered.
- Only a small amount of blood is outside of your body at one time
- Dialysis done as an outpatient, three times a week
- 3-4 hours each treatment



Why or Why not choose In-Center hemodialysis

Pros

- No equipment at home
- RN's and technicians perform your treatments
- Get to see and visit with other dialysis patients
- Blood cleaned 3 days per week with 4 days off
- Weekly visits from health care providers

Cons

- Blood only cleaned 3 days/week
- Lose residual kidney function sooner than PD
- Must follow the rules of the center
- Must travel to center 3 times a week. Treatment times scheduled by dialysis center.
- Post recovery time (0-12 hours)

Making the best dialysis choice for you

- Each type has advantages and disadvantages
- Talk with your family, caregivers, and health care team about what is important to you



If you choose **NOT** to start dialysis

- For most people with ESRD, dialysis improves your quality of life
- But for some people, dialysis may not improve your life, in fact may prolong suffering for those with multiple serious health problems
- You **DO** have the right to decide not to start treatment if you feel the burdens of dialysis outweigh the benefits to you
- Dialysis or transplant is not for everyone.



Patient Rights

- Is deciding not to have dialysis suicide?
 - No, many religions believe in a person's right to refuse medical treatment like dialysis if they feel it will not help them or be burdensome.
- How long will I live?
 - It varies from person to person
- Is dying from kidney failure painful?
 - Not usually
- People with ESRD can live anywhere from days to weeks without dialysis, depending on how much kidney function you have left

Hospice vs. Palliative Care

Hospice

- Support people in all aspects of the dying process
- Provides family support
- Provides pain management
- Can be done in:
 - Your home
 - A hospice facility
 - Hospital

Palliative Care:

- Manages symptoms of chronic disease
- Supports family and patient
- Can be used at any time (not only at end of life)
- Shown to extend life spans



- There is always something new for treating kidney disease
- If you move to another treatment type, it depends on your symptoms and your choice

It's your Treatment, Your Choice