Kidney Konnections

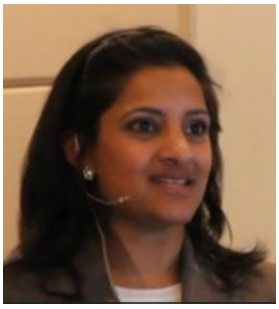
A publication of the Bay Area Association of Kidney Patients

The Bay Area Association of Kidney Patients is an all-volunteer, non-profit, 501(c)3 organization formed to educate and support Bay Area kidney patients. Visit us at **www.baakp.org**

Is Peritoneal Dialysis for you? By Robert Furniss

Our January 2012 Education Presentation attracted 109 patients, supporters and professionals with a dual agenda. **Anjali Saxena, M.D.,** Nephrologist and Director of Peritoneal Dialysis at Santa Clara Valley Medical Center and Clinical Assistant Professor of Medicine at Stanford presented on the topic "**There Is No Place Like Home Peritoneal Dialysis".** Dr. Saxena stressed that patients have different needs and goals and that the patient and family should consider all options for ESRD treatment in consultation with the physician. Additionally, the wait for a kidney transplant in the Bay Area can be long and many dialysis patients can expect to change treatments over their life time. since no one type of dialysis is better than the others for all patients, patients and their families should study their options before deciding on a dialysis treatment, and remember to take lifestyle into consideration when choosing a treatment. A dialysis comparison chart is available at **http://www.homedialysis.org/files/ModalityComparison.pdf.** The outcomes are similar, but Peritoneal Dialysis offers freedom, choice and personal control.

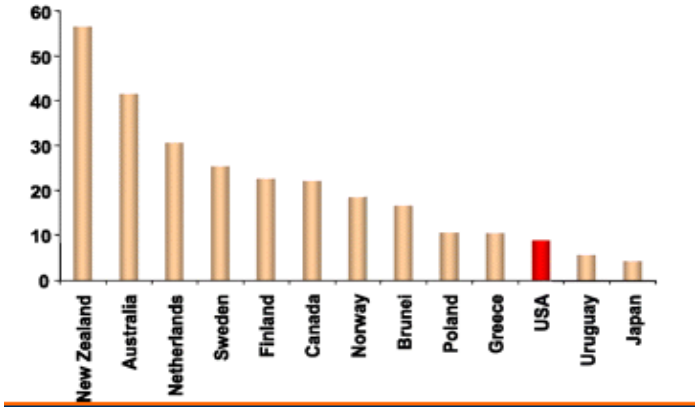
Peritoneal Dialysis (PD) uses a simple silicone rubber access tube (catheter) surgically placed through the skin and stomach wall into the peritoneal cavity. It is fully secured surgically and cannot fall out; the surgery is an outpatient procedure. Dialysis solution is fed into the cavity through the tube, left inside to draw impurities from the blood, and then drained, at which time it looks like urine. This can be done manually or with an automatic cycler overnight. The PD patient has control, visits the clinic monthly for lab tests, and controls the ordering of all supplies. Travel is easier and the schedule flexible; one may dialyze at night or during the day, and can travel for special occasions without having to schedule Hemodialysis visits 3 times a week at a clinic far from home.



Dr. Anjali Saxena

The graph on the next page illustrates PD use varies throughout the world. In the U.S., PD is used only 9%, whereas in New Zealand, it is 56% and in Hong Kong, 90% (due to a government cost decision). Interestingly, several research studies have shown that when U.S. patients are properly educated about PD, nearly 50% of them end up choosing peritoneal dialysis.

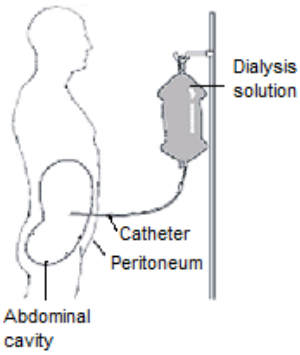
Time Considerations: In-Center Hemodialysis takes 13-17 hours/week, plus ½ hour driving time each way, for 3 sessions a week. Plus, the HD time is understated as many people require 4 to 8 hours recovery after each session, resulting in a the total interval for HD ranging between 28 to 40 hours per week. Contrast this with peritoneal dialysis: the actual amount of time a patient spends "doing dialysis" with a PD cycler are 7 to 10.5 hours/week. With manual PD exchanges, the time increases to 18.5 hours/week. Additionally, PD's gentle cycle requires little or no recovery time and patients can do regular daily activities in between their exchanges throughout the day.



World Peritoneal Dialysis use as percent of all dialysis

Infections: The major risk with PD is peritonitis which is an infection of the abdominal wall lining. This usually occurs due to accidental contamination during the connection or disconnection of the PD tubing, for example if a patient mistakenly touches the open tubing while connecting a bag of solution. To reduce the risk of infection, PD patients learn how to perform the procedure carefully and cleanly before they are allowed to go home. The average patient will have 5-7 days of training one-on-one with the PD nurse before starting home PD. When infections do occur, they are infrequent; the average national infection rate is one infection every 2 years but it is much less in the Bay Area (many local centers report less than one infection every 4 years) Contamination, constipation and general hygiene are the most frequent causes of infections; wash hands ,wear a mask Keep pets out of the room, and windows closed to exclude dust.when connecting up. The average rate of peritonitis in the U.S. is about the same as the rate of HD (graft) fistula infections. bacterial blood infections due to HD catheters are much more frequent than peritoneal or fistula infection rates, and are much more dangerous. ontrary to misconceptions, PD can be performed in obese, very muscular patients, amputees or ostomy patients. The learning process is simple; little formal education is needed and PD is preferred for young children and infants.

Other facts about PD were brought out during the question and answer session. PD is possible despite internal scarring from past operations. Laparoscopy (minimally invasive surgery with a TV camera) allows catheter placement and simultaneous surgery to remove scar tissue with 99.9% success. Diabetics may have to adjust their insulin levels due to sugars absorbed from dextrose dialysate or they can use a dextrose-free solution called Icodextrin. (Some countries allow a more expensive amino acid dialysate, which is not currently approved for general use here in the U.S., and is not paid for by Medicare). Hemodialysis can cause blood pressure and emotional variations; PD is a more gradual process, with less effect on the blood pressure. You can go swimming in chlorinated or salt water, providing it is not polluted or stagnant, but avoid hot tubs. The average person does not feel bloated using PD; in a blinded study, patients could not tell the difference between 2, 2.5 and 3 liters in the peritoneum! On the "cycler", use the "tidal peritoneal" setting to leave a little solution behind to avoid any discomfort while draining. You won't feel as cold on PD as you might on HD; the automated "cycler" brings the dialysate to body temperature and the patient uses a heater for manual dialysate bags. (In-Center HD dialysate is cooler at 96.8°F, so the patient may feel chilled. The choice between manual and the automated "cycler" PD systems can be based either on medical issues or personal preference. On the all-important question of money, Medicare and MediCal cover home dialysis from the first day, whereas Medicare begins to pay only after you've completed 3 calendar months of in-center HD. The cost per year for PD is roughly $25,000 less per year than in-center HD, so Medicare has been favoring PD for many years.



Peritoneal dialysis

In conclusion, Dr. Saxena encouraged kidney patients to study all their dialysis options before choosing a dialysis therapy. □

To contact Dr. Saxena:
Santa Clara Valley Medical Center
408-885-4845

Announcing a wonderful new BAAKP service for you!

EAST BAY PATIENT SUPPORT GROUP
Sundays 1-3 pm
April 7, 2013 & July 7, 2013

Sterling HSA: 475 14th St., Suite 650, Oakland

What you need to know about Kidney Disease diets

By Robert Furniss

Our second speaker was Renal Dietitian **Faith Tootell**, MS, RD, CSR, FADA. Ms Tootell is Nutrition Services Manager with Satellite Dialysis and a kidney transplant patient herself. Her very comprehensive presentation identified the nutrition goals for each level of kidney function and therapy. Diets for all stages of kidney disease and all treatment modalities are optimized to fight infection, sustain energy and maintain ideal weights.

Ms. Faith Tootell

For **early chronic kidney disease (CKD),** nutrition needs focus on preserving kidney function; limiting the production of waste products from food (especially protein which increases urea, creatinine and uric acid levels); as well maintaining fluid, sodium, potassium, calcium and phosphorus balance. During **hemodialysis**, the goal is to minimize the build-up of wastes so to limit the need for additional dialysis, and reduce water accumulation (causing edema) between treatments. **Peritoneal dialysis** presents the same nutritional challenges as does hemodialysis, with the additional need to replace protein and often, potassium losses, as well as to prevent weight gain from the additional calories absorbed from PD dialysate. Following **transplant**, the diet needs to aid in the healing process after surgery and limit the side effects of immunosuppressive medications.

Ms. Tootell summarized how various foods help to meet these goals for each type of treatment. (Please consult the included table summarizing the variations in the diet.)

Calories help the proteins build and repair tissues. When calories are too low, protein is used for energy, causing more protein waste for the kidneys to remove. High calorie foods are sugars, fat and starches.

Protein is necessary to fight infections and help build and repair muscle tissue. Proteins are also the building blocks of hormones, enzymes and antibodies needed to stay healthy. Extra protein may be needed to replace proteins lost in Peritoneal Dialysis. High protein foods are meat, poultry, fish, eggs, tofu, quinoa and dairy. Choose these complete proteins instead of incomplete vegetable proteins (corn, beans, etc), as incomplete vegetable sources will add to the dialysis workload. Consult with your renal dietitian for the best choice for protein powders.

Excess **Sodium** elevates the blood pressure, so limit table salt, soy sauce, canned soups, processed meats, cold cuts, chips, crackers, pickles and condiments. Avoid salt substitutes as they usually contain potassium. You may find that eliminating or reducing salt restores the "real" taste of foods.

Failing kidneys cannot remove excess blood **phosphorus** which may lead to mineral bone disease. Patients should eat less phosphorus containing foods AND likely need to take prescribed phosphate binders. Research shows that many patients would benefit from taking phosphate binders before dialysis, often in Stages 3 or 4 CKD The highest phosphorus containing-foods are dairy, all sorts of dried beans, nuts and dark cola sodas. One should examine food labels carefully and avoid foods with phosphates phrases such as pyro**phosphates**, meta**phosphates**, etc. Phosphates contained in proteins are absorbed more readily; whereas the phosphorus in vegetables is not absorbed as easily by the body. Try to stick to fresh foods whenever possible amd avoid fast foods as they are loaded with phosphorus additives which can double the amount of phosphorus consumed and absorbed by the body. **Calcium** is another element to watch with kidney disease. Healthy kidneys maintain an optimum calcium/phosphorus balance. When kidney disease strikes, excess calcium (above 2000 mg/day

Other Kidney Resources– Check our website at www.baakp.org for more!

American Association of Kidney Patients AAKP

2701 N. Rocky Point Dr.
Suite 150
Tampa, Florida 33607
(800) 749-2257

www.aakp.org

San Francisco Polycystic Kidney Foundation
1-800-PKDCURE

www.pkdcure.org/sanfranciscochapter

sanfranciscochapter@pkdcure.org

Transplant Recipients International Organization TRIO

2nd Thursday of each month
7:30 pm. El Camino Hospital,
Conference Room G
2500 Grant Road,
Mountain View, CA
(408) 353-2169
www.bayareatrio.org

The National Kidney Foundation

131 Steuart St Ste 425
San Francisco, CA 94105
www.kidneynca.org
888-427-5653

www.kidney.org

Following the KIDNEY DIET through all phases of CKD

	Chronic Kidney Disease (CKD)	Hemodialysis	Peritoneal Dialysis	Post Transplant
Calories	Increase to offset reduced protein & phosphorus intake	Aim for 14 to 16 calories per pound or 30-35 kcal/kg of ideal body weight or Standard Body Weight*	Limited if sugar calories are absorbed from dialysate	May be reduced to limit side effects & weight gain due to better appetite
Protein	Limited to preserve kidney function by decreasing workload. Often 0.6 to 1.0 gram/kg SBW/day	Typically 1.2 gm protein/kg SBW/day to maintain muscled. Types of protein eaten may change	Need to eat more protein to offset losses from PD. 1.2-1.3 gm protein/kg SBW/day (4 oz/day for someone weighing 115 lbs)	Protein levels are increased to foster healing, then reduced to normal. Initially 1.2-2.0 gm/kg SBW/day, then 0.8-1.2 gm protein/kg SBW/day
Sodium	Limit to control blood pressure & fluid retention. May require extra if kidneys excrete too much or certain diuretics are prescribed	Limit to help control blood pressure & fluid weight gain between dialysis visits. 2000 to 2500 mg/day is typical	Limit especially if difficult to control fluid balance with standard dextrose dialysate solution. Typically 2000-2500 mgs daily	Sodium often limited because of post-transplant medication side effects. Plan on 2000-3000 mgs daily
Phosphorus	Limit phosphorus to preserve kidney function & prevent CKD-MBD (Chronic Kidney Disease Mineral & Bone Disease)	All types of dialysis: limit phosphorus intake to meet blood level targets, help prevent bone disorders and calcium deposits in heart & blood vessels. Generally 800-1000 mgs per day Phosphorus or 10-12 mgs phosphorus per gm of protein consumed per day is recommended		Diets are individualized customized. May require Phosphorus supplementation after transplant
Calcium	Avoid supplements or calcium-fortified foods for all modalities	Dialysis all types: Avoid extra calcium & maintian low-normal blood levels. Extra calcium doesn't necessarily go to bones; it may deposit in heart & blood vessels		Extra may be needed because of calcium loss with some transplant medications, suggest 1200-1500 mgs/day
Potassium	Not usually restricted in early stages	Blood levels indicate requirements; usually 2000-3000 mgs/day	Unrestricted or mildly limited to 3000 mgs/day	Blood levels and medications dictate the requirements
Fluid	Not usually restricted in early stages. Need to keep fluid moving through diseased kidneys	Fluid limited as kidneys fail, depending on urine output and blood pressure. Typically 1000 ml + urine volume/day	Limited (along with sodium) if dialysis cannot maintain fluid balance & blood pressure; typically 1500-2000 ml/day	Not limited
Vitamins & Minerals	Daily renal multi-vitamin	Water soluble vitamins are lost to dialysis, yet fat-soluble vitamins may accumulate abnormally. Renal vitamins, generally B complex with C, plus folic acid may be prescribed.		A multivitamin may be recommended, and occasionally, extra potassium, calcium and/or phosphorus

SBW: Standard Body Weight

(Continued Kidney Disease diets)

from all sources: food, dialysate, medications, phosphate binders) can cause deposits in the heart and blood vessels.

Healthy kidneys maintain normal **Potassium** levels; impaired kidney function may cause dangerous potassium levels. Blood levels of potassium that are either too high or too low may cause muscle and nerve problems and possibly dangerous, even life threatening heart complications. Most fresh fruits and vegetables are high in potassium, especially those that are deep green or dark yellow: avocado, citrus, melon, bananas, all dried fruit, nuts, chocolate, dried beans and legumes.

Normal Kidneys remove extra **fluid** through the urine, but in CKD, fluid balance is frequently disturbed. Excess salt can create thirst, leading to increased fluid intake, retention and increased blood pressure. All foods that are liquid at room temperature are considered fluids, including Jello, ice cream coffee, soda, etc. Foods that are cooked and then drained do not count as a fluid.

Vitamins and Minerals are important; it is recommended to avoid "over the counter" vitamins or herbal supplements. (Check with your Nephrologist and Renal Dietitian, who may prescribe "Renal" vitamins.) Zinc, Magnesium and Iron may also be prescribed by your doctor.

Managing your nutrition status is critical to slowing the progression of Chronic Kidney Disease to dialysis and/or transplant. Consulting with a **Renal Dietitian** can improve your health and quality of life. □

Contact information for Ms. Tootell:
WellBound/Satellite Dialysis, 650.395.6236
tootellf@satellitehealth.com

WE WELCOME NEW MEMBERS to the BAAKP BOARD OF DIRECTORS

By Phil Wyche

Dhiman Barman's mother in India is affected with Kidney disease and Dhiman joined BAAKP to learn more about kidney disease. With a Ph.D. in Computer Science, Dhiman works as a software engineer in Silicon Valley. And as a hobbyist film-maker, Dhiman wants to educate and promote kidney disease awareness through film documentation. Dhiman is our videographer.

Leesa Yim. After losing her father to kidney disease, and herself a kidney transplant and diabetic patient Leesa wants to be part of a solution to help others learn about of kidney disease. A native of Korea, Leesa wants to target the younger generation by helping them understand kidney disease and the kidney options available. Leesa volunteers at the Ronald McDonald house and visits hospice patients. Leesa is our new co-Development Chair.

I to r: Dhiman Barman, Leesa Yim, Vivian-Jan Tarkul, Tien Tracy Tarkul, Pablo Tellez

Tien Tracy Tarkul. Researching for information about kidney disease for her husband who recently was diagnosed with kidney failure, Tien was directed to the BAAKP. A passionate person, Tien wants to learn all she can and to communicate with the Vietnamese community about kidney disease. Tien volunteers at a Vietnamese orphan clinic, the Regional Medical Center of S.J., and nonprofit organization, Viet Aid Fund. Tien is our Board and Presentation Hospitality Chair.

Vivian-Jan Tarkul. Having a father with chronic kidney disease, Vivian remembers how frightened their family was. Finding our non-profit organization, Vivian is learning more about kidney disease and options available which she shares with families and outreach patients. Vivian volunteers at Ronald McDonald House, as labor coach at Asian Health Services and is a chairperson for the Volunteer Services at San Jose /Regional Medical Center. Vivian-Jan is a graduate student at San Jose State and is the BAAKP newsletter editor.

Pablo Tellez. Pablo became a chronic kidney disease patient as a result of cancer surgery. A graduate in Geology, with graduate studies in theology and public administration, he developed economic and labor market resources for the City of Oakland, then became a partner in a management and organizational development consulting firm. He is now retired and is a professional artist.

Although each has their own reason for joining the BAAKP, we welcome them and others that may wish to join the Board of Directors. **The Board currently needs a Social Medial Manager, a Recording Secretary and has other openings as well; please contact us.**

Thank You to Our Speakers and Sponsors!

The BAAKP is a non-profit organization supported by grants, donations and volunteers.

Thank you to the following for your support:

- The **Palo Alto Medical Foundation**: for the use of their facilities for our educational and support groups.
- Our Sponsor: **Edward Morgan** and **Baxter Healthcare**, who generously supported this event.
- Our Speaker on Peritoneal Dialysis, **Anjali Saxena, M.D.** for sharing her expertise on PD.
- Our speaker on kidney diets, **Faith Tootell,** for communicating kidney diet details.
- Our local merchants from **Palo Alto Neighborhood Shopping Centers** for providing gifts and prizes:

From the new Alma Plaza Shopping Center:
Miki's Farm Fresh Market (3445-A Alma St)

From the Mid-town Shopping Center:
Walgreens (2605 Middlefield Rd.)
Baskin Robbins (2615 Middlefield Rd.)
Subway (2717 Middlefield Rd.)
Coffee Roasting Company (2675 Middlefield Rd.)

Bay Area Association of Kidney Patients

Post Office Box 2332
Menlo Park, CA 94026-2332

Phone: (650) 323-2225
Email: info@baakp.org

Please visit our website at www.baakp.org to make a donation, see back issues of our newsletters, and view videos of our past meetings. Your help is greatly appreciated!

Educating and Supporting Bay Area Kidney Patients

SAVE THESE DATES !

Held at PAMF, 3th floor
795 El Camino Real, Palo Alto, CA

Educational Events

- **May 19, 2013 (1-4 pm)**

UC Davis-Kidney Transplant /Lab Reports

- **September 22, 2013 (1-4 pm)**

Support Group Meetings

- **April 21, 2013 (1-3 pm)**
- **July 21, 2013 (1-3 pm)**

East Bay Support Meeting

Sterling HAS
475 14th Street, 6th floor, Oakland, CA

- **April 7, 2013 (1-3 pm)**
- **July 7, 2013 (1-3 pm)**

Board of Directors' Meetings

1st Tuesday of the month
At 6:00 pm

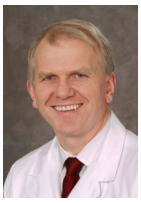
If you would like to join us in the leadership of this group, we would love to have your help.
info@baakp.org (650) 323-2225

Don't Miss the **May 19, 2013** Presentations!

Kidney Transplant: Reduce the wait, try a different region or live donation.

Plus, Understanding your Lab Reports!

The BAAKP will welcome two representatives from UC Davis to our May Presentation. Dr. Christoph Troppmann is a transplant surgeon and will detail the kidney transplant program at UC Davis, which performs over 250 kidney transplants per year. (Since it is a different region, the wait time can be shorter.) Dr. Troppmann also has a particular interest in in single-incision live donor kidney removal surgery, dialysis access procedures and kidney preservation techniques. Joining him will be Dr. Shubha Ananthakrishnan, Nephrologist from UC Davis who will help us understand the significance of those "numbers" which result from our laboratory tests and will also help us understand what can be done to improve those numbers.



This **FREE** event will be at the Palo Alto Medical Foundation, 795 El Camino Real, 3rd floor conference room, Palo Alto, CA 94301 on Sunday, May 19, 2013 from 1 to 4 pm. There will be ample time for social interaction and patient support. Kidney-friendly refreshments will be served! **To reserve your seat, please go to the website at www.baakp.org or call 650-323-2225.**

This event is generously sponsored by DaVita.