On May 19, 2013, the Bay Area Association of Kidney Patients (BAAKP) members learned the details of the UC Davis Kidney Transplantation Program from Christoph Troppmann, M.D., Professor of Surgery, Department of Surgery, at UC Davis.

The University of California at Davis began kidney transplants over 30 years ago, performed the first laparoscopic live donor nephrectomy on the West Coast, and has over 50 full-time staff devoted to kidney transplantation. They have multiple outreach clinics throughout Northern California. These outreach clinics, the closest to the Bay Area being in Walnut Creek, perform pre-transplant evaluations and care after 90 days post-transplant. In 2012, UC Davis was the fourth largest adult kidney transplant center in the United States by volume (264 transplants).

Increased numbers of people on waiting lists coupled with organ shortages present challenges for all transplant centers. Over the last 5-7 years, in their quest to reduce waiting times, UC Davis has pioneered the use of organs from deceased donors which have previously gone unused. One way is to use organs from Expanded Criteria Organ Donors (ECD). It has been shown statistically, that the ECD kidneys do not last as long as “normal kidneys”, thus they are not offered to anyone less than 55 years of age. Another method is to use the...
two kidneys from one adult donor. They also use kidneys from donors who have been exposed to Hepatitis B or C for recipients who have antibodies to Hepatitis B or C viruses, and who therefore will not develop Hepatitis C. Two unique techniques are to use both kidneys from an infant donor under 20 pounds, or kidneys with reversible damage.

One of the tools used by Davis surgeons to improve utilization of organs that have historically been underused is “pump preservation” for all deceased donor kidneys prior to transplant. This has been found to be a huge value to long-term kidney preservation. At the same time, by using the pumped kidney’s measured resistance and flow, doctors can determine organ viability. Studies have shown that pumped kidneys have better immediate function, decreased length of patient hospital stay, and better long-term outcomes. Up to 25% of transplanted deceased donor kidneys do not work well at first (which coincides with the national average) and the patient may go home on dialysis for a while until the kidney “wakes up”. Incidentally, the Pulsatile Pump Perfusion ECD kidneys have almost the same survival rate at 4 years as the Standard Criteria Kidneys (SCD). About 64% of Davis’ kidneys (vs. 22% for the U.S average) are accepted from other regions providing UC Davis a larger pool of kidneys with which to work.

Davis also has a large live donor transplant program, with 7 specifically dedicated employees. They provide “targeted recipient education” about the benefits of a live donor and suggestions about how to ask for a kidney. Benefits include the fact that your live donor kidney graft will last about twice as long (~18 years) as the deceased donor graft (~10 years). For those with incompatible donors, they may use paired exchange transplants within the center, or national domino transplants through national registries. Also, they may use desensitization to reduce donor-specific antibodies with pre-transplant IVIG infusions for carefully selected live donor recipients.

UC Davis is also working hard to improve the live donors’ experience. Traditionally, donor kidneys were obtained by “open nephrectomy” using a large curving incision resulting in much pain and hospital stays of 5-6 days. In 1997, UC Davis began to use traditional laparoscopic kidney removal with 5 small incisions which reduced the hospital stay to 2-3 days. And then, since 2010, Davis has offered to nearly all of their live donors kidney retrieval by a single incision through the belly button, accompanied by less scarring, less pain and faster recovery.

Summarizing the success of the UC Davis program, Dr. Troppmann emphasized that at Davis, median time to transplant (when ½ of the waitlisted patients were transplanted), was 3.6 years, whereas the wait for Bay Area programs was greater than 6 years and the national average is 4.4 years (data published by the Scientific Registry of Transplant Recipients (SRTR) at www.srtr.org). Dr. Troppmann presented additional SRTR data showing that more than 25% of the adults on the UC Davis wait list are transplanted each year, compared with the U.S. average of 17%. UC Davis’ pre-transplant outcomes are statistically significantly better than expected by the SRTR model. One-year kidney graft survival is 94%, which is exactly at the national level; the three-year graft survival is 90%, which is higher (though not statistically significantly so) than the national average at 86%. They look at every possible deceased donor kidney every time. UC Davis will transplant recipients up to 80 years old if they are medically suitable.

To increase your chances of getting a prompt transplant, Dr. Troppmann advises the patient to stay physically fit, to remain in compliance with your medical treatments, and to sign up for an ECD donor kidney if you are over 55. Interestingly, UC Davis, because of short waiting times, requires a complete medical workup prior to listing. The attendees were reassured about the transit time to get to Sacramento from the Bay Area.

(Continued UC Davis Transplant Program)

(Continued on page 4)
Every time you shop on Amazon.com, you can help BAAKP with a donation at no cost to you. It’s simple. First, go to our new Bay Area Association of Kidney Patient’s website at www.baakp.org. Then, click on the Amazon hyperlink “Shop Now” button. You will see the Amazon Web site, which is linked to BAAKP or if you already have an account, it will show your Amazon home page at amazon.baakp.org. Lastly, shop through Amazon for books, music and all your needs. A percentage of your purchases will be donated to BAAKP by Amazon. This does not cost you anything; your name, your purchases, and the amount you spend are not visible to BAAKP. Note: you will not receive any acknowledgment of your donation, so we thank you in advance!

Thank You to Our Speakers and Sponsors!

The BAAKP is a non-profit organization supported by grants, donations and volunteers. Thank you for your support of our May 19, 2013 Presentation:

- The Palo Alto Medical Foundation: for the use of their facilities for our educational seminars and support groups.
- Our Sponsor: DaVita Inc. and to those in the corporation who facilitated this event: Danny Shapiro, Bryan Dudley, and Sarah Krivel.
- Our UC Davis Speakers:
  - Christoph Troppmann, M.D., FACS, Professor, Department of Surgery, (916-734-7283, christoph.troppmann@ucdmc.ucdavis.edu) for introducing the UC Davis Transplant Center;
  - Shubha Ananthakrishnan, M.D., Assistant Clinical Professor of Medicine, Nephrology Department, (916-734-3774, shubha.ananthakrishnan@ucdmc.ucdavis.edu) for explaining to attendees how to understand and interpret kidney lab reports and
  - Michelle Sturges, RN, BSN, Living Donor Transplant Coordinator, (916-734-4917, Michelle.Sturges@ucdmc.ucdavis.edu).
- Our local merchant Erik’s Deli Cafe (2 N. Market St, San Jose, Ca).
In May 2013, BAAKP launched a completely redesigned website, with exciting new capabilities to enhance the mission to Educate and Support Bay Area Kidney Patients.

Now from the comfort of our home, the new website (www.baakp.org) allows us to reach out to other patients to share our kidney disease journey. Instead of going it alone, coping with Chronic Kidney Disease (CKD) and making important choices with only limited information, we now can learn about other patients’ experiences on the BAAKP website.

Additionally, in August 2013, BAAKP launches a new “Ask The Expert,” series featuring live video sessions on the website. Leading nephrologists, dietitians, nurses, social workers, etc. will answer questions about living with CKD.

On August 4th, 2013, from 1-2 pm, popular nephrologist, Dr. Toby Gottheiner from PAMF will be our first guest. Most of the hour will be devoted to answering questions from patients and caregivers. He will then review the current hot topic, “When Is The Right Time To Start Dialysis? A New Consensus Emerges.”

On August 18th, 2013, we will feature Marianne Wolfe-Hutton, RD, CSR, CDE, a renal dietitian and certified diabetes educator. Visit our website after July 25th for further details.

We invite all patients and caregivers to register on the new website (If you like, you may use a nickname for privacy reasons.) or email to questions@baakp.org. See you there!

New BAAKP Website! Exciting New Features!!
by Patrick Barron

(Continued from page 2)

because the doctors have much advance notice (hours or even a day) of kidney availability.

There are two OPOs (Organ Procurement Organizations) in Northern California: CTIDN (California Transplant Donor Network) with 4 kidney transplant centers and SDS (Sierra Donor Services), with the transplant center at UC Davis. You can be double-listed, that is, listed in both regions at the same time. You can also transfer your “wait time” from one center to another in the same or a different region. There are approximately 7000 on the kidney wait list at the 4 Bay Area transplant centers and about 1000 waiting at UC Davis, so it might be beneficial to be listed in both OPOs!

Previously, Stanford, UCSF and California Pacific Medical Center described their kidney transplant programs (see www.baakp.org for back copies of newsletter articles and videos) and now with Dr. Troppmann’s presentation, we complete our review of the local kidney transplant centers. □

This newsletter is not intended to take the place of personal medical advice, which should be obtained directly from your Doctor.
Dr. Shubha focused on a few of the most important tests ordered by your Nephrologist. Malfunctioning kidneys do not remove the normal amounts of BUN (Blood Urea Nitrogen), creatinine, phosphorus and potassium. Also, in CKD, ailing kidneys cannot produce sufficient erythropoietin, the hormone needed for red cell production by the bone marrow. Dr. Shubha explained that the BUN measures the breakdown and retention of protein. High creatinine values result from the abnormal retention of normal muscle tissue breakdown products. The GFR (Glomerular Filtration Rate) reveals how well your kidney filters are working; the higher the number the better. Nephrologists “stage” your kidney disease using the GFR number. (see chart) Also, as your creatinine value increase, your GFR values decline; that is, your kidney function is decreasing.

The normal levels of potassium is between 3.5 and 5. In CKD, potassium builds up in the body; abnormally high levels (over 7) can affect the muscles and heart. Potassium is in most foods, especially brightly colored fruits and vegetables; orange juice and bananas are prime offenders. Additionally, some medications such as lisinopril (ACE inhibitors) and losartan (ARB’s), taken for High Blood Pressure (HBP) can also raise your potassium levels.

“Bicarb” or CO₂ (Carbon Dioxide) measures the acid/alkali balance in your body; normal values vary between 23-28. With CKD, acid levels increase and you may need to take an alkaline medication to maintain normal acid levels.

Phosphorus (P) is a very necessary chemical element, found in bones, teeth and cell membranes. Normal phosphorus readings are from 3 to 4.5. However, normal phosphate levels are difficult to attain because it is a large molecule and not easily excreted by diseased kidneys. Additionally, phosphorus is in almost everything we eat; meats, whole grains and dairy products to name a few!

Remember the “Rule of 5”! Dr. Shubha held up her hands and asked the audience “How many fingers?” She then said “Five on each hand, so use your fingers to remind you to maintain potassium and phosphorus lab test results each around 5 and you’ll be okay”. This is a fabulous tool to help you remember how to control these 2 lab values.

One problem with abnormally high levels of phosphorus (hyperphosphatemia) lies in the phosphorus/calcium partnership. Those high levels of phosphorus cause the parathyroid gland (in your neck) to increase the production of Parathyroid Hormone (PTH), which leads to calcium being taken from your bones (renal osteodystrophy) and then deposited in your heart and blood vessels, causing your heart to enlarge and blood vessels to become stiff. Not a good thing! (Low levels of Vitamin D can also contribute to high levels of PTH, so check with your nephrologist about Vitamin D supplementation.)

To aid in phosphate control, your Nephrologist will insist (no, demand) that you take your “phosphate binders” religiously! Routine 3 times a week dialysis may not remove all the extra phosphorus; more frequent dialysis may help, but you can go a long way towards phosphate control by adhering to the Kidney Diet recommended by your Renal Dietician.

Caution! Up to a third of your daily phosphorus intake can be from food additives. Look for the words on prepared food labels that contain “phos” and avoid “hidden” phosphate in prepared foods. Food manufacturers love to use phosphate additives to make their products creamy, non-melting, and juicy; and to prevent ingredient separation and to enable foods to last longer.

The hemoglobin (Hgb), contained within your red blood cells, uses iron to transport oxygen throughout your body. When the Hgb values are low (anemia), you may feel abnormally tired. Treatments for low Hg include iron (by mouth or infusion) and synthetic erythropoietins (Epogen and Aranesp).

Lastly, another important lab value discussed by Dr. Shubha was the Kt/V value, which indicates how clean your blood is after dialysis. Look for desired values of 1.3 to 1.4 for hemodialysis (HD) or 1.7 for PD (peritoneal dialysis) patients. Again, you may need to increase your dialysis time.

Okay, so there it is! Understanding your lab values is simple! We thank Dr. Ananthakrishnan for enlightening and inspiring our attendees to take a few minutes to learn the normal and abnormal values for these eight important lab tests. ☺
September 22, 2013 Educational Presentation:

STAGES AND EMOTIONS OF CHRONIC KIDNEY DISEASE!

On September 22, 2013, we are fortunate to have two great presenters! We will learn about early intervention and how to get ongoing support with the diagnosis of Chronic Kidney Disease (CKD).

Glen Chertow, M.D., MPH, Chief of the Nephrology Department at the Stanford Hospital and Clinics, will discuss “Stages of CKD: What Do They Mean and What Should We Do?”

Nancy Powers, Ph.D., Psychologist, will then talk about emotions associated with CKD diagnosis, including depression. By popular demand, our patient panelists will share their personal stories.

Don’t miss this FREE event on Sunday, September 22, 2013 from 1 to 4 pm at the Palo Alto Medical Foundation, 795 El Camino Real, 3rd floor conference room, Palo Alto, CA 94301. There will be ample time for social interaction and patient support. Refreshments will be served! Door prizes too! To reserve your seat, please go to the website at www.baakp.org or call 650-323-2225.

This event is generously sponsored by