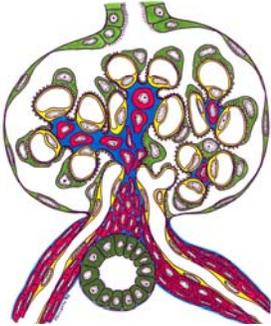


KIDNEY CARE

FALL 2014

APPROVED BY THE UNC-CH INSTITUTIONAL REVIEW BOARD



Health care professionals and patients working together to learn more about diseases that affect the filters (glomeruli) in the kidney.

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WHAT YOU EAT DOES MATTER IN KIDNEY DISEASE PROGRESSION

Kristen Sheriden, RD, CSR, LD

Chronic kidney disease (CKD) progresses through five stages, the last of which requires dialysis or transplantation. One way to delay the progression of these stages is through diet. The amount of protein and salt eaten as well as how well you control blood sugar if you have diabetes plays a significant role slowing CKD progression.

It is important to eat enough protein, but not too much. Protein is found in chicken, fish, turkey, beef, pork, eggs, nuts, dairy, and legumes. Too much can cause increased toxins to build up in your blood. Not enough can lead to malnutrition. Clearly, not eating the right amount can make you sick, so it is important to monitor the protein in your diet. The right amount of protein for you is determined by your size, age, the medical conditions you have, and your specific stage of kidney disease. The best way to know how much protein is right for you is to talk with your kidney doctor and to a dietitian who can calculate the right amount of protein to fit your exact needs.

Sodium is also important to look out for in your diet. Lowering salt intake decreases blood pressure and the amount of protein passed-out through the urine. Controlling these factors may slow the progression of CKD. The United States Department of Agriculture's Dietary Guidelines for Americans, 2010 and the National Kidney Disease Education Program at the National Institutes of Health recommend 1,500mg of sodium per day.

Here is a look at major sources of sodium:

- Deli and processed meats – sausage, bacon, ham, bologna and salami
- Canned goods – soups, stew
- Sauces – gravy, condiments, marinades, soy sauce, barbecue sauce, salad dressing
- Baked goods – muffins, bagels, pretzels,
- Other major sources of sodium include, frozen dinners, popcorn, seasoning mixes, ready to eat and boxed meals, vegetable juice and cottage cheese.

The best way to avoid excess sodium is to eat at home and cook from scratch. While this may be difficult in our fast paced world, you can decrease the amount of sodium you eat by choosing fresh meats, fresh or frozen fruits and vegetables, low sodium canned goods, low sodium sauces and gravies, unsalted nuts, chips, crackers, and pretzels, air-popped popcorn, and low sodium cheese. Also, do not add salt in cooking or at the table. You should season your food with fresh spices that complement your dish such as garlic, onion, basil, cinnamon, rosemary, or citrus juice.

It is also important to become comfortable reading food labels to know how much sodium is in your food. Look at the "Nutrition Facts" panel on your food package. Look at the serving size. The nutrients listed, including sodium, are for this amount of food. Make sure you measure this.

Continued, page 2

(continued from page 1)

If you eat more than the serving size, you will consume more nutrients than listed on the nutrition facts panel. For example, if you are eating cookies and the serving size is two cookies, but you eat the whole package which contains six cookies, you will have to triple the amount of sodium listed on the label! Sodium will be listed in mg per serving. Try to aim for less than 1,500 mg sodium total in one day.

In addition to watching the sodium in your diet, another way to slow the progression of chronic kidney disease is to control your blood sugar if you have diabetes. It is encouraged by Kidney Disease Improving Global Outcomes (KDIGO), an international group of experts, that you maintain your HgbA1C ~ 7 percent. This is a lab that tells how well your blood sugars are controlled. The reason this is so important is because diabetes causes micro-vascular complications, meaning it hurts tiny blood vessels, including those in our kidneys. You can prevent this by maintaining healthy blood sugar. It is very important to talk to your doctor about what medicines may be right for you in treating diabetes and CKD. You should also talk to a dietitian about an eating plan to maintain your blood sugar. The dietitian will help develop an eating plan for eating carbohydrate and other nutrients. Because diabetes medicine and diet are unique to each individual, it is critical to see a doctor and dietitian to ensure you have good control of your diabetes.

Other lifestyle factors are important in protecting your kidneys. Stopping smoking, exercising for 30 minutes daily five times a week, and maintaining a healthy weight are all recommendations from KDIGO. Smoking increases the risk of kidney failure. Therefore, if you quit, you'll decrease your risk. Losing weight, if necessary, can improve blood pressure and decrease protein in the urine. Remember, high blood pressure and protein in your urine are risk factors for CKD. Exercise can help maintain good blood pressure and help lose weight. Therefore, these lifestyle factors may lead to delaying the progression of CKD.

In conclusion, there are multiple ways diet can play a part in delaying the progression of CKD to dialysis or transplantation. They include appropriate protein in your diet, eating no more than 1,500 mg sodium daily, maintaining good blood sugar control, and practicing beneficial lifestyle habits. So, throw away your salt shaker, and make an appointment with your doctor and dietitian today. What are you waiting for? Let's get started! CKD progression can wait!



References:

1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.
2. National Kidney Disease Education Program. Sodium: Tips for People with Chronic Kidney Disease. Bethesda, MD: U.S. Government Printing Office, Sept 2011. NIH Publication No. 11-7407. Fact Sheet.
3. Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2012 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. *Kidney inter., Suppl.* 2013; 3: 1-150.
4. Kristin Sheridan, RD, CSR, LD is a renal dietitian working at University Hospitals Case Medical Center in Cleveland, OH. She attended University of Dayton and currently works with dialysis patients, both home and hemodialysis.

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NEWS FROM CAPITOL HILL: CURRENT BILLS AFFECTING KIDNEY PATIENTS

House Bill 4814: Chronic Kidney Disease Improvement in Research & Treatment Act

This bill supports improvements in the research, treatment and care of chronic kidney disease. The bill has three main parts:

1. **Improving knowledge through care management and coordination of research efforts:** This bill asks the Secretary of Health and Human Services to evaluate the biological, social, and behavioral factors that affect care and submit a report on ways to improve care management, especially for minority populations. The bill also asks for greater coordination of federal research programs focused on kidney disease.
2. **Improving access to treatment:** This bill would expand pre-end stage kidney disease classes (covered under Medicare) to all patients with kidney function less than 29% who are not already on dialysis. Payment policies would also be changed to better incentivize home dialysis.
3. **Create more insurance options and improve coordination of care:** This bill would allow dialysis patients to have increased access to Medicare Advantage plans and would create a voluntary coordinated care program so health care providers and dialysis facilities can work together to improve quality of care.

House Bill 5263: Living Donor Protection Act

This goal of this bill is to promote and protect living organ donors from discrimination by:

1. Prohibiting life, disability, and long term care insurance companies from denying or limiting coverage and from charging higher premiums for living organ donors.
2. Clarifying that living organ donors may use the Family and Medical Leave Act (FMLA) to take time away from work to recover from donation.
3. Directing the Department of Health and Human Services to update their materials on living organ donation to reflect these new protections and encourage more individuals to donate.

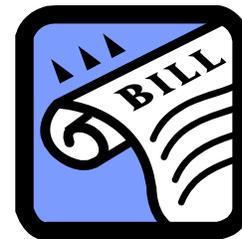
House Bill 1428/Senate Bill 323: Comprehensive Immunosuppressive Drug Coverage for Kidney Transplant Patients Act

Currently, Medicare only covers transplant coverage for 36 months for those patients who are not eligible for Medicare due to age or disability. This bill would extend Medicare Part B coverage for immunosuppressive medications to those individuals not currently covered for the life of the transplant.

S 1547/HR 3831: Veterans Dialysis Pilot Program Review

This bill requires the Secretary of Veterans Affairs to review the Department of Veterans Affairs' dialysis pilot program and submit a report to Congress before expanding the program. The report must address recommendations that were provided in a report from the Government Accountability Office. The dialysis pilot program began in 2009 as a means to improve continuity of care and accessibility to outpatient dialysis services.

**Learn more about these bills at
www.congress.gov or www.govtrack.us**



**WANT TO CONTACT YOUR
REPRESENTATIVES AND
URGE SUPPORT FOR
THE BILLS LISTED?**

ON THE WEB:
WWW.HOUSE.GOV
WWW.SENATE.GOV

BY PHONE:
1(800) 333-4636

Use these resources to find out who represents you and how to contact them. If you need help locating your representative, leave a message on the GDCN patient line with your name, address, and telephone number and Caroline will let you know who they are :
1-877-462-9371

*The Renal Support
Network's Wellness &
Education Kidney Advocacy
Network is an excellent
resource for kidney patients
who want to advocate on a
national level. Please visit
www.rsnhope.org for more
information.*

PATIENT REPORTED OUTCOMES: A NEW WAY TO MEASURE DISEASE

Jill Cooper, MPH

“PRO” ...you may have heard of this term recently or been invited to participate in a focus group to help develop a PRO, but what are PROs and how are they used in the healthcare world?

In recent years, there has been an increased focus on the patient experience. Healthcare professionals and researchers want to learn more about what is important to patients in terms of outcomes, and they want to put patients at the center of healthcare research. A patient-centered approach is necessary to be able to fully understand the impact of medical treatment and care. Patients can tell us many things - thoughts, complaints, and personal experiences - that technology and doctors cannot. They can report symptoms and aspects of quality of life that are affected by their disease or treatments. These are referred to as Patient-Reported Outcomes (PROs). A PRO is a response about the status of a patient's health that is collected directly from the patient to learn more about the impact of the disease and its treatment. Examining PROs can help doctors understand how patients feel and function, so they can better guide clinical care and trials. In clinical trials, a PRO can be used to measure the effect of the intervention being studied from the patient's perception. The use of PROs provides a more holistic interpretation and a broader assessment of the benefits of the treatment being used. Input from doctors and researchers can offer some insight into the experience of patients, but it is essential to hear what patients have to say about the impact and severity of their symptoms.

Focus groups and individual interviews are common methods used to collect data directly from patients to develop a PRO measure. The data collected is then used to create surveys and questionnaires that will measure the impact of disease and treatments.

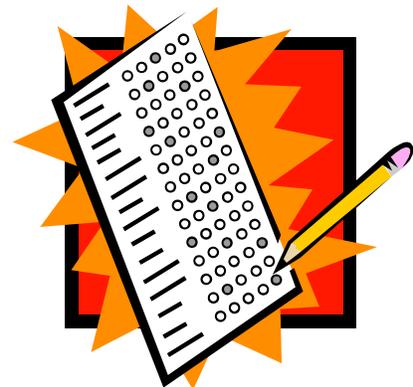
PROs can measure results in different ways. PRO data may be collected from self-administered questionnaires completed by the patients themselves, or through interviews. They can measure a moment in time, such as a patient's rating of the severity of pain, and can also report changes from a previous measure such as a new case of nausea after starting a new drug. A new drug could work well by improving clinical outcomes, but PROs can help to identify if the drug is causing any bad side effects, or decreasing someone's quality of life. Another feature of a PRO measure is that it can be generic (designed to be used in any disease population), or disease-targeted (developed specifically to measure those aspects that are important for people with a particular medical condition).

Gathering information from patients about their experiences and how their disease and its symptoms impacts different areas of life is a very important part of medical care. It can allow researchers and clinicians to collect data with the hope of improving clinical decision making, facilitating policy-making by health plans, adding to research, and ultimately improving the health and quality of life among patients.

For more information on Patient Reported Outcomes, please visit:

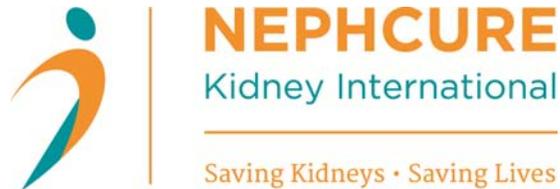
Patient Centered Outcomes Research Institute: www.pcori.org

PRO Measurement Information System: www.nihpromis.org



NEPHCURE COMMUNITY EDUCATION PROGRAMS

NephCure Kidney International is expanding their educational series to include new programs for everyone! Patients and their families impacted by FSGS and Nephrotic Syndrome will appreciate the relevant topics, various formats, and convenient web-based platforms. Please visit, www.nephcure.org for more information.



NephCure Community Cafes (recently expanded Lunch & Learn Series)

- Experts in Kidney Health at your fingertips!
- Topics: health, nutrition, research and much more
- Content designed for newly diagnosed patients & more experienced families
- FREE breakfast and luncheon provided with tips for healthy eating.

Upcoming Meetings/Locations: October 18th (Indianapolis and Toronto), November 1st (Bay Area/Palo Alto), November 8th (Greater New Jersey/Philadelphia). Sponsored by Genentech, Questcor, Duet

NephCure Community Calls

Empowering people affected by FSGS or Nephrotic Syndrome is the goal. Each call has a theme and includes time for question and answers. The next call is November 20th: Preparing for your Kidney Transplant

NephCure Welcome Webinar

Offered on weeknight or weekend evenings, people can easily-log-in anywhere with internet access. Hosted by NephCure staff members - includes time for question and answers. Next meeting is November 13th.

NephCure Parents' Place

We'll discuss topics/themes common to caregivers. Using an online meeting platform, participants are seconds away from experiencing an in-person support group that doesn't require travel! Upcoming meetings: October 9th (Avoiding Colds/Flu) and December 11th (Anxiety & Chronic Kidney Disease).

NephCure Walks

The NephCure Walk is NephCure's walking fundraiser designed to raise vital dollars to further our mission of saving kidneys, saving lives. More than a fundraiser, The NephCure Walk provides support for those lives that have been touched by Nephrotic Syndrome and FSGS while raising awareness in our communities. Come on out and meet other patient families in your area! Upcoming Walks: Raleigh, NC (October 4 at Lake Benson Park), Orlando, FL (October 11). Check out the website for more walks and email events@nephcure.org if you would like to start an event near you!

To register and receive specific event details and times please contact the Department of Education and Engagement:

Lauren Lee, Director

Kelly Helm

Sandie Rollins,

Dept. of Education & Engagement

Manager of Patient Engagement

Manager of Patient Education

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PATIENT MEETINGS/SUPPORT GROUPS

North Carolina/Raleigh VF Chapter Meeting

Date: Saturday, October 25th, 2014

Time: Registration begins at 9:30 am

Meeting from 10:00 am to 2:15 pm, including lunch

Location: John Hope Franklin Center

2204 Erwin Road

Durham, NC



Highlights include:

* **What's Happening in Vasculitis Research?**

Speaker: Dr. Will Pendergraft, Assistant Professor of Medicine in the UNC Kidney Center at UNC-CH School of Medicine will discuss ongoing clinical and translational research both locally and internationally.

* **Small Group Discussions**

The meeting includes time to talk one-on-one and in small groups with other vasculitis patients, family members and friends.

For further details and registration information:

Call Chapter Leader **Elaine Holmes** at **919-908-9600**; email: eholmes18@nc.rr.com

You can also access the group's website at: <http://ncvasculitissupportgroup.memberlodge.org/>

If you are not close to NC, visit www.vasculitisfoundation.org to find a support group near you.



KIDNEYTalk

24/7 Podcast Radio Show

Informative. Inspirational. Entertaining.



Topics That Matter To People Living with Kidney Disease (www.rsnhope.com)

RSN's KidneyTalk is an online bi-weekly, half-hour radio talk show featuring RSN Founder & President Lori Hartwell. Periodically Stephen Furst, television and movie actor/producer/director and transplant recipient, is her co-host. All shows (over 200 of them!) are available 24hrs a day and can be downloaded for free any time from the iTunes store .

NEW NATIONAL REGISTRY: THE CURE GLOMERULONEPHROPATHY NETWORK (CUREGN)

The Cure Glomerulonephropathy Network (CureGN) is a five-year cohort study of 2,400 children and adults with the following glomerular diseases: minimal change disease (MCD), focal segmental glomerulosclerosis (FSGS), membranous nephropathy (MN), and IgA nephropathy (IgAN).



We still have a lot to learn about why people develop glomerular disease and what the best medicines are to treat it. This registry, like the GDCN, brings a large group of patient data together and makes it easier for researchers to perform studies. This registry will help researchers learn more about the causes of glomerular diseases and the treatments available, leading to better care for patients like you.

Inclusion Criteria

This study will be accepting all ages diagnosed with MCD, FSGS, MN, or IgAN on their first kidney biopsy

- The first kidney biopsy has to have been **within 5 years of study enrollment** and access to first kidney biopsy report and/or slides must be available.
- Willingness to follow with study requirements (donation of blood and urine samples, travel for study visits) .

Exclusion Criteria

- End Stage Kidney Disease, defined as chronic dialysis or kidney transplant.
- Solid organ or bone marrow transplant recipient at time of first kidney biopsy
- Diagnosis of any of the following at the time of first diagnostic kidney biopsy:
 - Diabetes
 - Lupus
 - HIV infection
 - Cancer, except for non-melanoma skin cancer
 - Active Hepatitis B or C infection

Enrollment starts this Fall! For more information, contact Caroline Poulton: 919-445-2636 or caroline_poulton@unc.edu

This study will help researchers learn more about the causes of glomerular disease and the treatments available, leading to better care for patients like you.



STUDIES CURRENTLY RECRUITING GDCN PATIENTS

The GDCN and the UNC Kidney Center are actively recruiting patients into the studies listed below and on the next page. Please contact the study coordinator listed at the bottom of page 9 if you are interested in learning more.

ANCA VASCULITIS:

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
RITAZAREM (Genentech)	Patrick Nachman	Anne Froment	Patients with a relapse in ANCA vasculitis- first treatment with rituximab infusion and steroid then maintenance therapy with rituximab or azathioprine.
PEXIVAS (NIH)	Patrick Nachman	Anne Froment	Patients with new or relapsing disease will be treated with standard of care with or without the addition of plasma-pheresis.
Chemocentryx (CL003_168)	Patrick Nachman	Anne Froment	Trial of a new oral drug that may lessen kidney inflammation in patients with ANCA vasculitis.

FOCAL SEGMENTAL GLOMERULOSCLEROSIS (FSGS)

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
Losmapimod (GSK)	Patrick Nachman	Anne Froment	Trial of a new oral drug which may lower protein in the urine and reduce the risk of kidney failure in patients with FSGS.
DUET (Retrophin)	Vimal Derebail	Anne Froment	Treatment study for FSGS patients who still have protein in their urine.

MEMBRANOUS NEPHROPATHY

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
ACTHAR (Mallinckrodt)	Vimal Derebail	Anne Froment	Treatment study for MN for previously treated patients who still have a lot of protein in the urine.

AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
REPRISE (Otsuka)	Patrick Nachman	Anne Froment	Placebo controlled study for ADPKD never previously treated with tolvaptan.

STUDIES CURRENTLY RECRUITING GDCN PATIENTS

LUPUS

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
STOP SLE (Broad Institute)	Will Pendergraft	Leslie Stewart	An observational study to identify differences between patients with lupus nephritis who respond to standard therapy and those who do not with the goal of helping physicians develop effective individualized treatment plans based on characteristics of each patient's blood.
PLUTO Trial: Belimumab (HGS/GSK)	Keisha Gibson	Sandy Grubbs	Treatment study using FDA-approved IV drug for children with lupus nephritis
ALLURE trial: Abatacept (BMS)	Will Pendergraft	Brenda Meier	Treatment study for patients with lupus nephritis using new IV drug that may lessen disease and reduce proteinuria.
ATLAS trial: Anti-TWEAK Antibody (Biogen)	Will Pendergraft	Brenda Meier	Treatment study for patients with lupus nephritis using new IV drug that blocks kidney inflammation.
BLISS-LN trial: Belimumab (HGS/GSK)	Will Pendergraft	Brenda Meier	Treatment study using FDA-approved IV drug for patients with lupus nephritis.

ANEMIA AND KIDNEY DISEASE

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
START CKD (Amgen)	Cindy Denu-Ciocca	Sandy Grubbs	Treatment with darbepoetin alpha-monthly visit at UNC for 2 years.

DIABETIC NEPHROPATHY

<i>Study name and sponsor</i>	<i>Study Doctor</i>	<i>Study coordinator</i>	<i>More about the study</i>
VPI-CLIN-201	Amy Mottl	Sandy Grubbs	Subcutaneous injection every 2 weeks (by yourself, at home, after training).
PDKDR (NIDDK)	Amy Mottl	Sandy Grubbs	Observational study
GS 4997 (Gilead)	Amy Mottl		Oral medication

STUDY COORDINATOR CONTACT INFORMATION:

Anne Froment

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Sandy Grubbs

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Leslie Stewart

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Brenda Meier

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RECENT PUBLICATIONS USING GDCN REGISTRY DATA

Thanks to your generous participation in our patient registries, we are able to conduct a wide range of studies to help further our understanding of glomerular (kidney) diseases. See below for some of our most recent publications. To read more, you can look up these articles on www.pubmed.com.



What Everybody is Doing but No One is Talking About: Use of Complementary and Alternative Medicine in the ANCA Associated Vasculitis Population. Berg EAB, McGregor JG, Burkhart ME, Poulton CJ, Hu Y, Falk RJ, Hogan SL. *J Autoimmune Dis Rheum.* In Press (May 2014).

Surveys were distributed in clinic to 107 registry participants diagnosed with ANCA vasculitis. Eighty-one percent of patients reported using complementary and alternative medicine (CAM). Sixty-four percent used prayer, 27% exercised, 19% used massage therapy, 13% used chiropractic services, and 7% used acupuncture. Twenty-eight percent reported using relaxation techniques, meditation and guided imagery. Among all patients, only 24% discussed using CAM with their physicians. Patients who said they used CAM were typically younger and found CAM practices to be helpful.

Personalized prophylactic anticoagulation decision analysis in patients with membranous nephropathy. Lee T, Biddle AK, Lionaki S, Derebail VK, Barbour SJ, Tannous S, Hladunewich MA, Hu Y, Poulton CJ, Mahoney SL, Charles Jennette J, Hogan SL, Falk RJ, Cattran DC, Reich HN, Nachman PH. *Kidney Int.* 2014 Jun;85(6):1412-20. PMID: 2440154

Medical chart information from membranous nephropathy patients was used for this study. Participants in the GDCN registry and the Toronto patient registry were included for a total of 898 patients. Patients with membranous have a higher risk for blood clots. The usual medicine used to prevent blood clots can be harmful because it can increase the chances of bleeding. The researchers used registry information to create a model to test whether the benefit of an anti-clotting drug outweighed the risk of major bleeding. This model has been used to create a tool (www.gntools.com) to help physicians decide whether to treat a membranous patient with anti-clotting drugs.

Clinical characteristics and outcome of pauci-immune glomerulonephritis in African Americans. Semin *Arthritis Rheum.* 2014 Jun;43(6):778-83. Geetha D, Poulton CJ, Hu Y, Seo P, McGregor JG, Falk RJ, Hogan SL. PMID: 24086456

Medical chart information from ANCA patients was used to compare clinical characteristics and outcomes between White and African-American patients. Participants in the GDCN registry and the Johns Hopkins registry were used, for a total of 672 participants. African American patients were younger and more often had MPO vasculitis. There were no differences between the two groups in response to treatment, end stage kidney disease, kidney relapse, or death.

Dysregulation of autoantigen genes in ANCA associated vasculitis involves alternative transcripts and new protein synthesis. McInnis EA, Badhwar AK, Muthigi A, Lardinois OM, Allred S, Yang JJ, Free ME, Jennette JC, Preston GA, Falk RJ, Ciavatta DJ. *J Am Soc Nephrol.* 2014 Jul 24. PMID: 25060059

Blood samples from registry participants with ANCA vasculitis and healthy controls were used for this study. Patients with ANCA associated vasculitis have antibodies that react to proteins, specifically myeloperoxidase (MPO) and proteinase 3 (PR3), found in abundant white blood cells (neutrophils). In patients, the precursors necessary for production of MPO and PR3 proteins are abnormally high. The results reported in the paper show that neutrophils from patients making the precursors, and not healthy individuals, produce new MPO and PR3 proteins. An alternative form of the precursor for PR3 was found more frequently in patients with active disease. Patients produce protein from the alternative PR3 precursor and they have antibodies that recognize the alternative PR3 protein. These results indicate the alternative PR3 precursor may be a molecular marker of disease activity and suggest the production of new MPO, PR3 and alternative PR3 proteins may expose the immune system to different autoantigens.

RECIPE BOX: HOME MADE CHICKEN & DUMPLINGS

Diet type: CKD non-dialysis Dialysis Diabetes

Recipe submitted by DaVita renal dietitian Donna.

Portions: 8 **Serving Size:** 1-1/4 cups

Ingredients

- ◆ 5 pounds roasting chicken, cut up
- ◆ 6 cups water
- ◆ 1/2 cup celery, diced
- ◆ 1/2 teaspoon salt
- ◆ 1/4 teaspoon pepper
- ◆ 1/2 teaspoon Mrs. Dash® herb seasoning blend
- ◆ 3 cups potatoes, peeled and sliced 1/4" thick
- ◆ 1 medium onion, sliced
- ◆ 1 cup all-purpose white flour
- ◆ 1 tablespoon butter, softened
- ◆ 1 egg, slightly beaten
- ◆ 3 tablespoons chopped parsley



Preparation

1. Peel and slice potatoes. Soak in a large pot of water for 3-4 hours to remove some of the potassium, or boil potatoes for 5 minutes, drain water, then add fresh water and cook until tender. Place chicken or turkey pieces in Dutch oven with 6 cups water. Add celery, salt, pepper and herb seasoning. Bring to boil. Reduce heat and simmer, covered for 60 minutes or until tender. Remove meat from bones and set aside.
2. Add leached or double-boiled potatoes and onion to broth. Bring broth to a boil and cook until potatoes are tender, approximately 15 minutes. Remove vegetables with slotted spoon and set aside.
3. In a large bowl, mix flour and butter together with a fork. Add egg and 2 tablespoons water; mix with fork until ingredients are moistened.
4. Roll out dough 1/3" thick. With a sharp knife, cut dough into strips.
5. Add noodle strips to broth and cook for 15 minutes (If using prepackaged dumpling noodles, simply add them to the broth at this time.)
6. Add vegetables and meat to the broth and simmer for 5 minutes.
7. Sprinkle with fresh parsley and serve.

Renal & renal diabetic food choices: 4 meat, 1-1/2 starch, 1/2 vegetable, medium potassium

Helpful Hints

- ◆ For convenience, you can use a package of prepared dumpling noodles like Mary B's® brand, which can be found in the frozen food section of your grocery store.
- ◆ If you are on a protein-modified diet, select a smaller 2.5-pound chicken to reduce protein to 21 grams per serving.
- ◆ Substitute 3 turkey legs, skinned, boned and chopped for chicken.

Nutrients per serving

Calories 285
 Protein 29 g
 Carbohydrates 23 g
 Fat 9 g
 Cholesterol 105 mg
 Sodium 422 mg
 Potassium 386 mg
 Phosphorus 386 mg
 Calcium 36 mg
 Fiber 1.1 g

GLOMERULAR DISEASE COLLABORATIVE NETWORK

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www.unckidneycenter.org