Chronic kidney disease (CKD) is a progressive and gradual loss of renal function. The prevalence of chronic kidney disease (CKD) and end-stage renal disease (ESRD) has increased steadily over the past decade in the US. Studies indicate that between 4 million and 20 million people in the US are affected by CKD, and approximately 560,000 of these patients require dialysis.[11]

The two main causes of chronic kidney disease are diabetes and high blood pressure, which are responsible for up to two-thirds of the cases. Kidney inflammation and infection such as glomerulonephritis is the 3rd main cause. Digestive tract conditions can also contribute to the cause of CKD. Progression of CKD is associated with several serious complications including anemia, hyperlipidemia, and cardiovascular diseases such as congestive heart failure and pericardial effusions.

CKD can also be the cause of high blood pressure and sugar levels. Atypical bacterial infections and parasite infections are common among CKD patients and the infection may contribute to the development of CKD. These complications further worsen and accelerate the CKD progression. To help improve CKD patients' kidney condition, the complications have to be addressed. Wei Laboratories treatment solution has proven to be highly effective in helping improve CKD patients' kidney condition and these complications.

Anemia

Anemia is defined as a reduction in one or more of the major red blood cell measurements: hemoglobin concentration, hematocrit, or red blood cell count. The National Kidney Foundation defines anemia as a hemoglobin concentration of less < 13.5 g/dL in men and < 12.0 g/dL in women. The prevalence of CKD- associated anemia is approximately 50%. The major causes of anemia in CKD patients are decreased erythropoietin syntheses. Erythropoietin is a glycoprotein secreted by the kidneys interstitial fibroblasts and is essential for the growth and differentiation of red blood cells in the bone marrow. In CKD, tubular atrophy and tubulointerstitial fibrosis compromises renal erythropoietin synthetic capacity and results in anemia.

Anemia can cause physical and mental dysfunction with symptoms of malaise, fatigue, weakness, dyspnea, impaired cognition, and other symptoms such as impaired sexual function. In CKD patients complicated with diabetes, anemia can contribute to retinopathy, neuropathy, or diabetic foot ulcer. Anemia can directly cause further progression of kidney disease. Renal ischemia due to reduced oxygen worsens renal medullary hypoxia, leading to renal interstitial injury and fibrosis. Anemia also causes increased renal sympathetic nerve activity, resulting in increased glomerular pressure and proteinuria which in turn accelerates the progression of kidney disease.[1]

Under anemic conditions, the heart contracts harder to meet the body's oxygen demand. Over time it causes left ventricular hypertrophy (LVH) and heart failure. Heart failure causes further renal function deterioration and leads to a vicious cycle termed the "cardiorenal anemia syndrome" which significantly increases morbidity and mortality of CKD patients.

To help improve the anemia condition, Wei Lab's Anemic Formula is recommended together with the kidney treatment including LC Balancer, Xcel, Formula C, and KS Formula. The Anemic Formula nurtures the blood and helps to enhance red blood cell production from the bone marrow. Patients can experience improvement in anemia related symptoms in 2 weeks. A sustained increase of red blood cell count can be achieved with 4-6 weeks of treatment.

Pericarditis and Pericardial Effusions and Other Cardiovascular Complications

Over 50% of CKD patients are likely to die from cardiovascular disease. End-stage CKD patients and dialysis patients have eight times the mortality rate of their age-matched counterparts in the general population. CKD patients can develop several types of heart conditions. Since the heart condition develops over a long period, patients can be asymptomatic. As the heart-related symptoms overlap with CKD, their heart condition can be easily overlooked in their treatment.

Congestive heart failure (CHF) is found in about one-quarter of cases of chronic kidney disease. The prevalence of congestive heart failure increases greatly as the patient's renal function deteriorates, and, at end-stage renal disease, can reach 65-70%. Chronic kidney disease is a major contributor to severe cardiac damage and, conversely, that congestive heart failure is a major cause of progressive chronic kidney disease.[2]

Pericarditis and pericardial effusions are common complications among end-stage CKD patients. Statistical studies show that 30% of pericardial effusions are caused by cancer and 22% of pericardial effusions are caused by CKD. Although the pathogenesis is poorly understood, it is found that pericarditis is related to uremic toxins. Uremic pericarditis is correlated to the degree of azotemia especially when the BUN is >60mg/dL (normal is 7-20 mg/dL). The incidence has been analyzed and in one of the studies involved with 83 patients admitted to the chronic dialysis program uremic pericarditis was occurred in 41%.[3,4]

Using echocardiography, the incidence of pericardial effusion has been accessed. Studies on a group of 41 stable asymptomatic patients on chronic hemodialysis found that 21 (51%) of them had developed pericardial effusions. Out of 21 patients with echocardiographic effusions, 15 of 41 (37%) of those had more than 100 ml fluid (normal volume is 3-5 ml).[5]

Arterial calcification can be caused by high serum calcium-phosphate levels in CKD patients. One study of 96 patients, aged 18–70 found coronary calcification in 64%, and severe calcification present in 23% of patients.

These cardiovascular complications have to be addressed in order to help CKD patients improve their kidney condition. Wei Lab's kidney/Anemia combined treatment can help CKD patients to improve their kidney condition as well as their cardiovascular complications. Patients can experience significant improvement in their symptoms with greatly enhanced energy levels with decreased creatinine and BUN levels in their blood work. However, if patients have advanced heart complications, their blood work may show increased blood creatinine and BUN levels. This reflects the response of the heart condition to the kidney and anemia treatment by down loading the toxic waste from the heart. As patients continue the treatment, their blood work will eventually show a decrease in the blood creatinine and BUN levels. Depending on the severity of their cardiovascular complication, it may take over 9 months before their blood work shows improvement. However, after the heart complication is resolved, patients can expect a reduction of 0.1 in blood creatinine with each month of kidney treatment.

To accelerate the improvement of their heart condition, Wei Lab’s heart treatment solution is recommended in combination with the Kidney/Anemia treatment including CV, Myogen, Qi Booster and B-2 with optional Kardinin if patients also have infective endocarditis. With the addition of heart formulas, the process can be shortened to 3 months or less. During the heart treatment, patients will experience further enhanced improvement of their energy while their blood creatinine and BUN keep climbing up followed with a sharp decline after the toxins in the heart have been cleared. Then patients will have 0.1 reduction of their creatinine level with each month treatment.

High Blood Sugar, High Blood Pressure and Hyperlipidemia

High blood pressure and sugar levels account for two-thirds of the causes of CKD. High blood pressure and sugar levels as well as hyperlipidemia are also common complications of CKD.

a) High Blood pressure

The kidneys play a vital role in long-term blood pressure regulation. Several factors associated with CKD can contribute to the increased blood pressure in CKD patients. First of all, damage of the tiny filtering units in the kidneys will result in retention of salts, wastes and extra fluid in the blood. Such extra fluid build-up in the blood vessels can raise blood pressure. Second, impaired sodium excretion in the kidney can cause increased peripheral resistance. Although the exact mechanism remains unclear, experiments have found that in a series of patients with renal failure due to histologically proven hypertensive nephrosclerosis, transplant with kidneys from normotensive donors resulted in the resolution of their hypertension.

Excess amount of renin produced by the failing kidneys due to the stimulation by the increased sympathetic nervous activity in CKD patients can cause over-activation of the renin-angiotensin system (RAS). It has been found to be the cause of uncontrolled hypertension despite optimized ultrafiltration in dialysis patients. Other factors include reduced generation of vasodilators such as nitric oxide and kinins; and imbalance between vasodilator and vasoconstrictor prostaglandins.[6]

Angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor antagonists are the common drugs used in CKD patients to control their blood pressure. However, both of these drug classes can cause a decrease in Hb concentration in patients with diabetes and CKD. These drugs can directly block the proerythropoietic effects of angiotensin II on red cell precursors, degradation of physiological inhibitors of hematopoiesis, and suppression of IGF-I. Losartan, a blood pressure medication used for renoprotection, can lower Hb by ~1 g/dl after long-term administration in 50- to 100-mg doses once daily in patients with diabetes and CKD. It should be recognized that these classes of agents may induce or worsen symptomatic anemia in nephropathy patients.[1]

Renal hypertension is also the cause of chronic kidney disease. Renal hypertension is caused by a narrowing in the arteries that deliver blood to the kidneys, a condition called renal artery stenosis. When the kidneys receive low blood flow, they act as if the low flow is due to dehydration and they respond by releasing hormones that stimulate the body to retain sodium and water. Blood vessels fill with additional fluid, and blood pressure raises.

The narrowing in one or both renal arteries is most often caused by atherosclerosis, or hardening of the arteries, the same process that leads to many heart attacks and strokes. Renal hypertension usually causes no symptoms, so organ damage can occur slowly without being recognized until the condition is well advanced. Since the condition is asymptomatic, the true prevalence is not known. Studies of insurance claims data and patients undergoing angiography for unrelated indications report wide variations in prevalence ranging from 0.5% to as high as 45%.[6,7]

Wei Laboratories kidney/anemia treatment solution can help CKD patients reduce their high blood pressure into a normal range. Patients can experience improved blood pressure with 2-4 weeks of treatment. With 6 weeks to 3 months of treatment, patients can reduce or stop taking their blood pressure medication while maintaining their blood pressure in the normal range. For patients with renal hypertension, the heart treatment solution is also required to help clear the atherosclerosis. Patients' improvement can be reflected in their blood work with 6 weeks to 3 months of treatment.

CKD Patients with a history of high blood pressure may see their blood pressure isn't high anymore when their CHF develops to the advanced stage because the failing heart is not contracting normally.[6,7] When patients with such complications use Wei Lab's treatment, they may experience a transient increase of their blood pressure for a short period of time as the heart starts contracting normally. As the treatment continues their blood pressure will be back to normal. It may be necessary to use blood pressure medications as needed during this period of time.

If the cause of the patients CKD is due to high blood pressure it is recommend to add CV and Breez to the protocol. CV helps to improve blood vessel properties which have become damaged and stretched from the high pressure

against the blood vessel walls. Breez helps to alleviate smooth muscle restriction to the blood vessel walls and lower blood pressure by clearing the Liver Wind.

b) High Blood Sugar and Diabetes

While diabetes can cause CKD, it is also a common complication of CKD. Patients with CKD have a decreased insulin secretion by the pancreatic β -cell and resistance to insulin in their liver and muscle cells. When glomerular filtration decreases below 50 ml/min insulin secretion will be decreased caused by metabolic acidosis and the elevation of intracellular calcium concentration and decrease of the cellular content of ATP and Na-K-ATPase pump activity in the pancreatic β cells.[8]

Patients with renal failure have impaired insulin sensitivity with consequent abnormal glucose levels due to an increase of gluconeogenesis in the liver, reduction of glucose uptake, and impaired glycogen synthesis in the liver. The cause of such insulin resistance is uremia toxins in CKD patients. Decreased tissue oxygen delivery because of anemia also contributes to insulin resistance in uremia.[8]

Wei Laboratories kidney/anemia treatment solution can help CKD patients effectively bring down their blood glucose levels into a normal range measured by fasting glucose level and HA1C. Patients can experience improved blood sugar levels with 2-4 weeks of treatment. With 6 weeks to 3 months of treatment, patients can reduce or stop taking their blood sugar medication or insulin while maintaining their blood sugar in the normal range. CV Formula is recommended to improve blood vessel properties which have been damaged due to the long-standing high blood glucose levels.

CKD Patients with diabetes and on insulin may see decreased insulin needs as their CKD becomes more advanced. The insulin endogenously secreted by the pancreas is removed from the blood by the liver, while the exogenous insulin which is taken as medicine is eliminated by the kidney. As the patients' kidneys are failing, the insulin can be circulating in the blood without being catabolized when the CKD reaches end-stage. Patients may need reduced insulin or even do not need insulin anymore.[8] When patients with such complications use Wei Lab's treatment, they may experience a transient increase in their blood sugar for a short period of time as the kidney starts disposing of insulin. As the treatment continues their blood sugar will be back to normal. It may be necessary to adjust their insulin intake as needed during this period of time.

c) Hyperlipidemia

Hyperlipidemia or dyslipidemia is characterized by elevated plasma levels of triglycerides, cholesterol, low HDL-cholesterol and small dense LDL particles. Hyperlipidemia is a common complication among CKD patients. The prevalence increases as renal function declines. The severity of the complication is proportional to the degree of renal impairment and the degree of proteinuria.

Several factors contribute to the development of dyslipidemia in CKD patients. CKD patients have a deficiency in the lipoprotein lipase and hepatic triglyceride lipase, which causes reduced uptake of triglyceride-rich, apolipoprotein B-containing lipoproteins by the liver and peripheral tissue, yielding increased circulating levels of these lipoproteins. Oncotic pressure changes due to impaired kidney function signals increased lipoprotein synthesis by the liver.[8] The degree of lipoprotein abnormality is proportional to the amount of proteinuria and inversely proportional to serum albumin levels. Increased production and decreased catabolism of lipoproteins cause hyperlipidemia.

Hyperlipidemia in CKD patients also causes a reduction in insulin production and insulin sensitivity. Lipotoxicity due to high levels of triglyceride and cholesterol is particularly toxic for pancreatic β-cells resulting in reduced glucose-stimulated insulin secretion and accelerated pancreatic β-cells apoptosis. Increased nonesterified fatty acid in CKD patients induces insulin resistance by blocking glucose uptake, a rate-limiting step in glucose metabolism. The mechanism has been studied and a model has been proposed based on their results. Nonesterified fatty acid and some of their metabolites, including acyl-CoA, ceramides and diacyglycerol, trigger protein kinases activations, which inhibits insulin receptor substrates (IRS) molecular, the key mediators of insulin signaling pathways, resulting in the glucose uptake blockage.[9]

Cholesterol lowering drugs such as statins that inhibit the enzyme HMG-CoA reductase to lower the production of cholesterol can't help improve the CKD patients' cardiovascular condition and increase their survival time. A large clinical trial of statins in 200 patients with stage 5 CKD and diabetes was conducted in Germany and the conclusion is that atorvastatin did not reduce death from fatal stroke, nonfatal myocardial infarction, or nonfatal stroke in these patients.[7]

Wei Lab's CV Formula is recommended together with the kidney treatment to address atherosclerosis of the renal artery wall and improve blood flow to the kidneys as well as the atherosclerosis of coronary and cerebral arteries.

Infections

CKD patients are more prone to infection because of related conditions such as diabetes, or inadequate calorie and protein intake. In addition, a suppressed immune system in CKD patients' due to uremia causes an increased susceptibility to infections by various infectious agents including bacteria, parasites, mycobacteria, and fungus. Chronic infections can cause damage and scarring to the kidneys leading to accelerated kidney degeneration. Around 48% of deaths in CKD patients are associated with these infections.

a) Bacterial Infections

Recurrent bacterial infections are a common issue among CKD patients and can turn into a potentially life-threatening condition. The most common type of bacteria that affects the bladder and kidneys is caused by the gram-negative bacterium, Escherichia coli (E. coli). Symptoms of a bladder infection include a strong and persistent urge to urinate, a burning sensation when urinating, passing a frequent and small amount of urine, urine that appears cloudy, strong-smelling urine, and pelvic pain. Symptoms can vary depending on where the infection occurs. If the infection only affects the urethra, the symptoms include burning with urination and discharge. If the infection spreads into the kidneys (acute pyelonephritis), symptoms can include back and flank pain, high fever, hematuria, shaking and chills, nausea, and vomiting. If the patient is currently experiencing bladder/kidney symptoms, the infection needs to be cleared before the full kidney protocol can be implemented.

The wellness recommendation for a bladder infection includes BI and UI. BI clears bladder Heat and helps to clear urinary tract inflammation. BI also helps to clear the Blood Stasis in the bladder to shed the scar tissue and heal the damaged lining of the bladder. The healthy bladder lining will not allow the bacteria to attach and therefore prevent bladder infections from reoccurring. Herbal ingredients in BI have been shown to contain many biological activities such as antioxidant, anti-inflammation, and wound healing. UI helps clear damp toxins in the Lower Jiao. UI helps clear infections by a gram-negative bacterium, such as E. coli, in the bladder, ureters, and urethra. Herbal ingredients in UI have been shown to contain antibacterial properties and have inhibitory effects against E. coli.

If the infection has spread to the kidneys, KS is also recommended. KS helps clear kidney Heat and remove infection and inflammation from the kidney. Pyrrosia Folium, an herb utilized in KS, has been used in Chinese medicine practice for the treatment of urinary infections, urolithiasis, and hematuria caused by damp heat. If KS can't resolve kidney gram-negative bacterial infection, K-2 is recommended. K-2 helps clear damp heat toxins in the kidney and clear kidney infections caused by gram-negative bacteria. If K-2 can't resolve the condition, K-3 is recommended.

b) Mycobacterial and Mycoplasma Infections

Infection by atypical bacterial is also common among CKD patients. CKD patients with kidney mycobacterial infections may have symptoms including back, flank and suprapubic pain, hematuria or dark-colored urine, burning with urination, increased urination at night or bubbles in urine. Symptoms may also include body heaviness and muscle weakness.

The incidence of Chlamydia pneumoniae infection has been studied in 227 ESRD patients using IgA and IgG anti-C. pneumoniae antibodies. 89 patients (39%) were found positive for IgA anti-C. pneumoniae antibodies and 107 patients (51%) were positive for IgG anti-C. pneumoniae antibodies.[12] IgA nephropathy has been found to associate with Mycoplasma pneumonia infections.[10] Since this type of bacteria does not have a cell wall structure, traditional antibiotic treatments are not effective.

Wei Labs have developed effective treatment solutions targeting mycobacterial and/or mycoplasma infections. It is recommended to start Nefnin and K-2 after one month of the full protocol or if improvement plateaus. Nefnin removes mycobacteria and mycoplasma from the kidneys. K-2 helps clear the gram-negative bacteria from the kidney, since gram-negative bacterial infections is a common co-infection for patients with mycobacterial infections. If patients are infected by multiple strains and improvement plateaus with Nefinin and K-2, N-2 and K-3 are recommended. N-2 helps clear the mycobacteria and mycoplasma that survived the use of Nefinin. K-3 helps clear gram-negative bacteria that survived the use of K-2. If patients also have a mycobacterial infection in the bladder and genital area, Mycocin is recommended. If patients also have a mycobacterial infection in the lungs, the recommended treatment solution includes Java, Jade, ClearLung and NewBase. Patients should experience symptom reduction with 1 week of treatment. 4-6 weeks of treatment may be required for significant improvement with sustained results. After the infection is cleared, Cellgen is recommended to add to the treatment to enhance kidney tissue regeneration.

c) Fungal Infections

Fungal infections of the kidney can cause varied lesions depending upon the type of organism. Fungal infections by Candida or Aspergillus is both a cause of CKD and a common complication among end-stage or renal failure patients. CKD patients with kidney fungal infections may have symptoms of difficult urination. Patients may have the urge to urinate, but little or no urine is passed.

If patients have a fungal infection it is recommended to start KS-F after one month of the full protocol or when improvement plateaus to remove fungus from the kidneys. If the patient's bladder is also infected, BI-F is recommended to clear bladder fungal infections.

d) Parasite Infections

Parasitic infections can be more hostile and life-threatening in CKD patients than in healthy people. A study was carried out on 142 patients with end-stage renal failure and 150 healthy volunteers. Parasites were found in 62 (43.7%) out of 142 dialysis patients and 19 (12.7%) out of 150 healthy controls, and the most prevalent intestinal parasites were Blastocystis sp. (23.9%) and Giardia lamblia (8.5%). In another study, Cryptosporidium antigen was observed only in patients with CKD (24.5%), but not in controls. Also, a very interesting report indicated that the prevalence of Cryptosporidium infection was 80% in patients with cancer, 25% in diabetics and 35% in dialysis patients. Toxoplasma, a tissue parasite, was tested using Anti- Toxoplasma IgG and it was found that 27.3% of 205 dialysis patients are positive vs. 3.6% of 306 healthy controls with positive response.[11]

Parasitic protozoa account for more morbidity and mortality than any other class of infectious organisms. Protozoa parasite infections also cause Glomerulonephritis and glomerular lesions. The glomerular lesions observed cover the whole range of lesions known. Most of these lesions are proliferative with an accumulation of cells in the glomerular tuft.

The clinical manifestations range from proteinuria of >3.5 g per day, hypoalbuminemia, generalized edema, hyperlipidemia, to nephritic syndrome and diminished glomerular filtration, azotemia, oliguria, hypertension, renal insufficiency, and rapidly progressive glomerulonephritis with increased creatinine level in serum. Types of infectious organisms include plasmodia which cause malaria, schistosomiasis, leishmaniasis, trypanosomiasis, Echinococcus granulosus, which causes Hyatid disease, filariasis, babesiosis, toxoplasmosis, trichinosis, opisthorchiasis.[13]

Wei Lab has developed effective treatment solutions to help CKD patients clear the parasite infection. The recommended formula includes Detocin for protozoan infections in the kidney and liver. Protomin is recommended if patients have protozoan infections in the bile duct. Protomin-R is recommended if patients have protozoan infections in the stomach and upper GI. WhiteHead is recommended if patients have protozoan infections in the large intestine and lower GI. Paramin is recommended for liver and bile duct parasite infection. Please refer to the Parasite Treatment Protocol for additional formulas and further required treatment recommendation.

Digestive Tract Conditions

a) Common Digestive Tract Complications

Gastrointestinal symptoms and diseases are common in patients with renal failure. Although CKD patients often suffer from morbidities such as coronary artery disease, the most common, non-renal, chronic disorders in patients with CKD patients are gastrointestinal disorders. Conditions with a high prevalence include constipation, gastroparesis, upper gastrointestinal lesions, acute and chronic episodes of gastrointestinal bleeding, pancreatitis, and ischemic colitis. The prevalence of constipation can be as high as 63%. These conditions can cause poor nutritional absorption which negatively affects their overall health, further worsening their renal conditions.[14]

Wei Lab's GI treatment solution can help CKD patients improve their digestive tract conditions in a very short period of time. The Spring Juice, Spring Capsule and Formula B help enhance the blood supply to the stomach, repair the injury of the GI lining, shorten the duration of gastric emptying process and increase intestinal contractions. Probiosis, PA and Whitehead help reduce pancreas, small and large intestine inflammation and infections. Patients can experience symptom improvement with 3 days of treatment and significant and sustained improvement with 2-3 weeks of treatment.

b) Food Allergy and Idiopathic Nephrotic Syndrome Idiopathic

Nephrotic Syndrome, also termed nephrotic syndrome or nephrosis, is characterized by the presence of nephrotic-range proteinuria, edema, hyperlipidemia, and hypoalbuminemia with protein excretion of >3.5 g per day in adult. Steroid drugs are commonly used for the treatment to reduce kidney inflammation.

In addition to infections, food allergies have found to be associated with idiopathic nephrotic syndrome. Research has shown that diet change can achieve complete remission for patients who did or did not have a history suggesting food intolerance and are not responding to steroid treatment. However, poor patient compliance to the diet change often results in a relapse.[15]

Wei Lab's GI treatment solution can effectively improve nutritional digestion to reduce and eliminate the underlined food allergy. Patients can experience symptom improvement with 2 weeks of treatment. 6-8 weeks of treatment is required for significant and sustained improvement.

Chronic Glomerulonephritis

If the cause of the patients CKD is chronic glomerulonephritis it is recommend to start Renogen and Cellgen after three months of the full protocol or when improvement plateaus. Renogen helps to dissolve scarring and fibrotic tissue in the kidneys formed from the chronic inflammation of the nephrons. Cellgen promotes repair of cellular damage to the epithelial tissue of the glomerulus and renal tubule in the nephrons and reverse tissue degeneration.

Kidney Stones

Individuals who are kidney stone formers are more likely to develop CKD. If patients have a kidney stone, it is recommended to address the stone before starting the full kidney protocol. A kidney stone may not cause symptoms until it moves around within the kidney or passes into the ureter. These symptoms include severe pain in the side and back, pain that radiates to the lower abdomen, pain with urination, pink, red, or brown urine, nausea, urinary frequency, fever, and chills if an infection is present, and urinating small amounts.

Based on TCM, kidney stone formation is caused by kidney damp and heat. Wei Labs KS Formula helps dissolve and remove kidney stones by clearing damp and heat in the kidneys as well as clearing inflammation and infection of the kidneys. Pyrrosiae Folium, an herb utilized in KS, has been used in Chinese medicine practice for the treatment of urinary infections, urolithiasis, and hematuria caused by damp heat. This herb works through the process of diuresis, or increased urine production, to help patients pass the stone. It also contains antibacterial activities to clear the infection within the kidneys. Patients can experience improvement in their urinary frequency, urinary infection, clearing of blood in urine, and pain with urination in just one week. 2-4 weeks of treatment is recommended for dissolving and passing the kidney stone.

If the patient is in an advanced stage of CKD, then LC Balancer can also be added at the start of the KS treatment. After 2-4 weeks, the full protocol can be added and will continue to address the cause and damage to the kidneys by the stones.

Polycystic Kidney Disease (PKD)

PKD is a genetic disorder that causes the formation of clusters of cysts and the associated progressive fibrosis in the kidney. PKD affects 1/400 to 1/1000 live births and is a leading cause of ESKD. Symptoms include back and side pain, headaches, and hematuria. Cyst infections are common and a serious problem which is difficult to treat causing high morbidity and mortality among PKD patients.

Wei Labs recommendation for PKD includes Renogen along with the full kidney protocol. Renogen helps to dissolve kidney cysts and the buildup of fibrotic tissue. If the patient suffers from recurrent bladder/kidney infections or kidney stones, it is necessary to remove infection using BI, UI and KS before starting the full kidney protocol. B-2 and Qi Booster are also recommended to support spleen and lymphatic circulation to reduce the amount of the fluid in the cysts.

Product Summary

Complication	Products
Anemia	Anemic Formula
CHF/Cardiovascular	CV, Myogen, B-2, Qi Booster
HBP	CV, Breez
High Blood Sugar/Diabetes	CV
Hyperlipidemia	CV
Bacterial Infection	BI, UI, KS, K-2, K3
Mycobacterial Infection	Nefnin, K-2, N-2, K-3
Fungal Infection	KS-F, BI-F
Parasitic Protozoan Infection	Protomin, Detocin, Protomin-R, Whitehead
GI/Food Allergies	SJ, Spring Capsule, Formula B
Glomerulonephritis	Renogen, Cellgen (after 3 months of the kidney protocol)
Kidney Stones	KS
PKD	Renogen, B-2, Qi Booster

Selected Case Studies

Case 1: Successful Resolution of Chronic Kidney Disease with Mitral Valve Prolapse

Dr. Gary Black, DC, LA

Dr. Black had a 52-year-old female patient with chronic kidney disease. The patient was experiencing symptoms of night sweats, cold hands, hot flashes, fatigue, and anemia. Initial blood analysis revealed her GFR at 14, Creatinine at 3.38, and BUN at 50. After reviewing her case history, Dr. Black recommended an initial 4-week treatment protocol of Xcel to strengthen kidney function, LC Balancer to support microcirculation, Formula C to restore kidney connective tissue, and KS formula to remove kidney inflammation.

After a month, the patient reassessed her blood work. Her GFR was at 15, Creatinine at 3.31, and BUN at 44. Her bloodwork revealed excessive protein in her urine. For the following month of treatment, Dr. Black recommended continuing with the LC Balancer, KS formula, and Formula C. He reduced the dosage of Xcel to 1/3 so as to not put too much pressure on the kidney. After an additional one month of treatment blood work showed further improvement with GFR at 16, Creatinine at 3.12, and BUN at 39. Towards the end of the 2nd month the patient discovered she had a cyst and also experienced bouts of dizziness. Dr. Black recommended adding B-2, to support

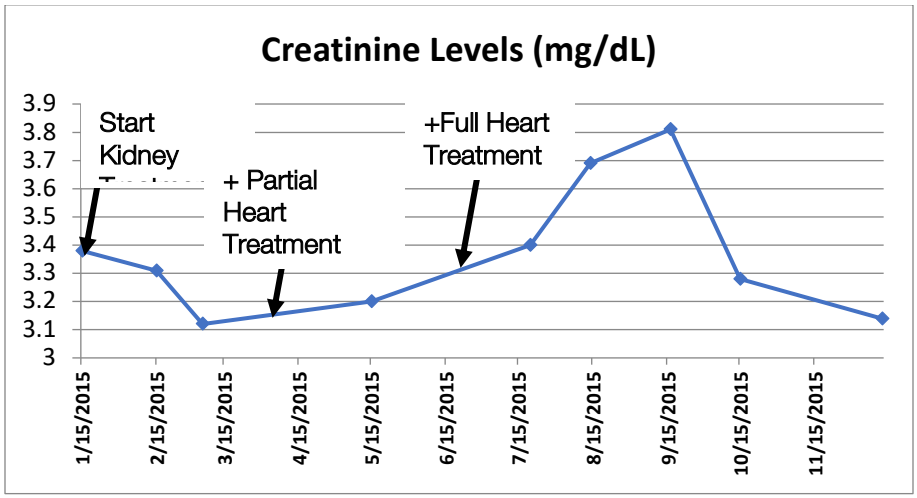
her lymphatic circulation and Spleen, and Qi Booster, to improve blood flow to the heart, at half dose along with the other products she was already taking.

Seeing consistent but slow improvement, the patient remained on the same protocol for the following two months. She reported that her MD wanted her to get a kidney transplant. The following month the patient discovered she had a mitral valve prolapse. Dr. Black recommended adding Myogen, to support heart function, and Nuresis, to improve bladder control, along with the other treatments she was already taking. After taking the Myogen and Nuresis for one month the patient reported that her heart felt more normal and she did have better bladder control. The following blood work showed BUN at 69, Creatinine at 3.2 and GFR at 15. Improved symptom relief along with increased levels of BUN and Creatinine indicate that as the kidney function improves, metabolic waste which has built up in the tissues and pericardium start to release to the blood stream.

Heart conditions such as pericardial effusion is a common complication for end stage chronic kidney disease patients. Since the patient is responding well with the initial heart treatment, the following 3 months Dr. Black recommended to continue with the Myogen to help unload the metabolic waste from the pericardium and add CV, B-2 and Qi Booster to dissolve atherosclerotic plaques from blood vessels with additional kidney formula including Renogen to remove scar tissue in the kidney and Cellgen to promote cell growth of the kidney. Anemic formula was also added to help her anemic condition. The following month the patient had a re-evaluation of her blood work and found her GFR was at 14, BUN at 44, and Creatinine at 3.81. The increased level of BUN and Creatinine is indicating further release of wastes from a possible pericardial effusion. The patient continued treatment for 3 more months and continues experiencing improvement in her energy and overall wellbeing. She was able to handle a very stressful situation in her work without any problem. However, blood work showed GFR at 14, BUN at 57, and Creatinine at 3.41 after 1 month; GFR at 13, BUN at 48, and Creatinine at 3.69 after 2 months; GFR at 14, BUN at 44, and Creatinine at 3.81 after 3 months.

After finishing 3 months of heart and kidney treatment, the blood work finally started showing improvements. In the 4th month since the heart treatment, the blood work started showing improvement with her GFR at 15, BUN at 53 and Creatinine at 3.28. After 6 months of treatment the blood work showed her creatinine was further decreased to 3.14 with the GFR at 15 and BUN at 45. Patient is continuing the treatment for both her kidney and heart conditions. The patient finally reported that she was seeing constant progress with her condition rather than seeing degradation.

Date	Before Rx	2/15/15	3/6/15	5/15/15	7/20/15	8/14/15	9/16/15	10/15/15	12/13/15
Treatment	None	Kidney	Kidney	+Partial Heart	+Full Heart	+Full Heart	+Full Heart	+Full Heart	+Full Heart
BUN	50	44	39	69	57	48	44	53	45
Creatinine	3.38	3.31	3.12	3.2	3.40	3.69	3.81	3.28	3.14
GFR	14	15	16	15	14	13	14	15	15



Case 2: Increased Kidney Function and Normalized Blood Pressure in CKD Patient

Dr. Charles Lewis, ND, AR

A 75-year-old male patient presented with frequent urination, joint aches, low energy, lower extremity edema, anemia, and high blood pressure of 159/81. The patient had a history of bladder infections stemming from the Vietnam War. He had been diagnosed with retinitis pigmentosa, congestive heart failure with 2 previous carotid surgeries on the right side, and stage 4 chronic kidney disease. Bloodwork on September 18th, 2017 showed GFR at 19, calcium at 9.8, BUN at 68 and creatinine at 3.02. The primary care physician was addressing his conditions through 3 blood pressure medications (metolazone, metoprolol, amlodipine), 4 urinary retention medications (furosemide, terazosin, tamsulosin, finasteride), and a statin (lipitor) for his heart. The patient was likely soon going to be recommended dialysis and was looking for a solution to enhance his quality of life.

On Oct. 26th, 2017, the patient started on 4 bottles of LC Balancer, Xcel, KS, Formula C, Anemic, and CV at full dose. LC Balancer, Xcel, KS and Formula C were added to increase microcirculation, restore kidney filtration capability, reduce kidney inflammation, and help repair the kidney structure which then leads to improved function. Anemic formula helps improve red blood cells production while CV was added to remove plague and repair artery damage. Within one month, the patient had reported having higher energy levels. The patient did lose some weight, but Dr. Lewis suspected the initial weight loss could be due to improved kidney function and its ability to filter out waste better.

The patient continued on 3 more months of the same protocol. On February 28th, 2018, the patient reported having the best sleep he has had in a long time. He had been experiencing pain with the left hip due to the cold and damp weather and Dr. Lewis suggested 6 Large WHITEE patches to help provide blood flow and increased nutrient supply to the area. On March 1st, 2018, Blood work showed increased GFR at 29, decreased calcium at 9.2, decreased BUN at 50.14 and decreased creatinine at 2.18. His blood pressure was also measured in the normal range at 108/63. He also reported gaining 4 lbs. Due to these improvements, Dr. Lewis suggested the patient be on 2/3 dose starting April and the patient is looking forward to checking in with his primary care physician in hopes of remove or lowering his blood pressure medications.

	9-18-2017	**3-1-2018**
GFR (above 60) *	19	29
Calcium (8.5 - 9.5) *	9.8	9.2
BUN (7 - 20) *	68	50.14
Creatinine (0.5 - 1.1) *	3.02	2.18
Blood Pressure (120/80) *	159/81	108/63

Case 3: Stage 3 CKD, Hypertension, Diabetes, and CHF Treatment

Wei Kidney Institute Practitioner

A 60-year-old male, Joel M reached out to Wei Kidney Institute in November 2018 looking into holistic options to help reverse his kidney disease and restore his GFR. Aside from CKD the patient also had HTN, diabetes, CHF, atrial fibrillation, ED, with a history of seizures, stroke, ankle ulcers, and GERD. The patient consulted with Dr. Lumpkin and completed the patient profile form. His main complaints were the CKD, neuropathy pain, and CHF. The patient was on several different medications including metoprolol, metformin, and warfarin to name a few.

In January 2019, he started on Wei Labs products Xcel, LC Balancer, KS, CV, and Breez, as well as with making dietary modifications to eat healthier. Xcel, LC Balancer, and KS were to address the kidney structure and function. Breez was indicated for his HTN and the CV for his heart condition.

LABS AT ONSET 10/22/18: GFR 41, Creatinine 1.79, and BUN 52.

Two weeks on the products the patient was feeling a lot better, had more energy, and his friends/family commented that he looked healthier overall. His neuropathy pain was moderating and not as strong as it was previous to starting the products. He continued to have some swelling but the discoloration in his legs had improved. His blood glucose had been well controlled averaging around 120. At the end of February, he reordered his second month of product.

At the end of month two on the products, he had an outpatient angiogram that went really well. He was expecting to have a stent placed per his doctor's recommendation but he did not end up needing it. The ankle edema persisted, his neuropathy was bearable but still present, he noticed a decrease in his urgency and frequency, his blood pressure and blood glucose were within a normal range. He continued on just the Xcel, LCB, and KS.

At the end of month three, the edema in his ankles had gone down quite a bit and the sock line on his ankle was no longer there. He did notice his neuropathy pain creeping back up. His systolic blood pressure remains slightly elevated at times. In mid-May, the patient had an echocardiogram that showed his AFib was well controlled and everything with his heart looked good functioning at 50-60%. The patient decided to discontinue products at this time due to financials. Three months later and results were still sustained. He is working up to continue with the CHF protocol.

LAB RESULTS AUGUST 2019: GFR 71, Creatinine 1.12, BUN 24.

	November 2018	January 2019	May 2019	August 2019
GFR	41	59	51	71
Creatinine	1.79	1.30	1.47	1.12
BUN	52	58	37	24
Sodium	141	140	131	140
Potassium	4.7	5.0	4.4	5.0
Chloride		106	104	102
Calcium	8.6	8.4	8.8	8.8
Albumin	3.2	3.2	3.9	3.9
Glucose	107	105	128	105
CO2	25	26	26	30
Protein	5.8	5.3	6.4	5.5
Albumin	3.2	2.9		2.8
Globulin	2.6	2.5	3.5	2.7
Bilirubin	0.5	0.5	0.4	
Alkaline Phosphate	135	173	123	154
AST	20	28	23	18
ALT	17	29	20	14

Case 4: Successful Treatment High Blood Pressure and Anemia Caused by Kidney Failure

Terry King-Bey, DNM, ND, Cleveland, OH

A patient was diagnosed with diabetes and kidney failure with symptoms of high blood pressure, low energy, poor sleep and bubbles in urine. This patient's quality of life was severely diminished and was put on dialysis 3 times a week to support the kidney as well as anemia shots for low iron levels. The patient began an herbal treatment with products from Wei Laboratories consisting of LC Balancer, Anemic Formula, and Xcel Capsules while keeping his medications and routine dialysis. After 2 weeks or treatment hemoglobin levels improved dramatically and doctors determined the patient no longer needed iron supplement injections. Blood pressure levels improved to that comparable to a 17-year-old. Urine quality improved and there was a significant reduction of bubbles in the urine.

This indicated less protein in the urine, a sign of improved kidney structure and function. The doctor was very impressed with these results. The patient reported much better energy levels and sleep quality. Night time urination also was no longer an issue. The patient is still undergoing treatment and is showing excellent progress.

Case 5: Successful Treatment of High Blood Pressure and Gout as Complications of Kidney Failure

Robert Caruso, DC, Kailua, HI

58M patient was diagnosed with kidney failure 10-15 years ago. His kidney problem started at 6 years old when his urethra was blocked and the urine reflux to the kidney which drowned the kidney and caused inflammation. He did not see a doctor then because he had no insurance. The patient's blood pressure is out of control which is 176/107 without medication and 152/94 with Losartan. He also frequently experiences gout attacks and is on Allopurinol. There are lots of bubbles in urine due to a high amount of protein in the urine. Exercise made him gain weight due to increased retention of more liquid. Can't go back to sleep after urinating.

A treatment with LC Balancer, Xcel, Formula C, KS, and Anemic Formula was recommended. After using 2 weeks of treatment, he stopped blood pressure meds and BP stays very good at 130/80 and sometimes 123/78. Stopped gout med Allopurinol and has not seen gout attack yet. He has also lost weight from 230- 225 to 210-208. After 1 month of treatment, he feels not so drained and less fatigue. His RBC went from 4.8 to 5.2. Usually, if he did some strenuous thing, the next day he will be very tired. Now, he no longer experiences that. The bubble in urine is much less. Can pee a good amount, before can only pee a little bit each time. His blood pressure stays good without any meds. There are only very few gout attacks without Allopurinol. After 3 months of treatment, his liver feels less toxic and overall, he feels much better and is in very good shape. The patient said even though not 100% yet, but he is finally out of hell. Right now, the patient is under parasite and mycobacteria treatment to address the original cause of his kidney condition.

Case 6: Successful treatment of Type II Diabetes Complication in CKD

Sandy Johnson, DC, Bend OR

64M patient visited Dr. Johnson for his Stage IV chronic kidney disease and diabetes. His glucose is at 139, BUN at 53, and creatinine at 4.5. Wei Labs' kidney treatment solution was recommended including LC Balancer, Xcel, Formula C, KS, Cellgen and Anemic Formula. After 1 month of treatment, his blood glucose levels have dropped to 105 mg/dL. Before it has never been below 130. On the next month's blood work, his Hgb A1C dropped from 6.7% to 5.9%. He never had such a level for many years since the diagnosis of CKD.

Case 7: Successful Treatment of Kidney Failure and Gluten Intolerance

Donald Snow, D.A.O.M., M.P.H., M.S., L.Ac. Lake Charles, LA

A patient with stage 4 kidney failure has been recommended treatment with Wei Laboratories LC Balancer and Xcel. Very limited results are seen from her blood work after 3 months of ongoing treatment. The patient was then reevaluated and it was found that the patient also had a poor GI condition with gluten intolerance, diarrhea, and hemorrhoids. Based on the assumption that her GI condition was inhibiting the kidney improvement, the patient was recommended Wei Lab's GI treatment including 1/3 of the regular dose of Spring Juice, Spring Capsule, Pearl Capsule, and Formula B. After 1 month, patient saw a significant improvement of the kidney function based on her blood work and urine tests. The patient continued the same treatment for another month and her blood work and urine test show further improvement. During the GI treatment, the patient also experienced an improvement in her symptoms including a feeling of weakness and tiredness and chronic fatigue. Her Primary Doctor is extremely impressed by the amazing results.

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