PAW HEALTH NETWORK INC.

RENAL FAILURE - CHRONIC

ABOUT THE DISEASE

The kidneys are very important organs with several crucial functions, beyond simply producing urine.

Chronic renal failure (**CRF**), **chronic renal disease** (**CRD**), and **chronic kidney disease** (**CKD**) all refer to the same condition which results in an inability to conserve body water, an inability to adequately clear metabolites and toxins from the blood stream, an uncontrolled loss of blood protein, an inability to regulate blood pressure, an inability to stimulate red blood cell production, and an inability to maintain vitamin D and blood calcium levels. **CRF** is an ongoing disease needing life-long management.

Common causes of **CRF** include birth defects, chronic bacterial infections of the kidneys, high blood pressure, autoimmune diseases, or can be secondary to acute renal failure (ARF). Please see the Renal Failure - Acute document for additional information.

Because the kidneys serve so many functions, the clinical signs of **CRF** vary, and may be rapid or slowly progressive. Some of the typical signs of **CRF** include:

- Increased thirst (polydipsia) and increased urine production (polyuria)
    - Patients may exhibit an inability to hold urine, leading to accidents, and they pass large amounts of urine
- Weight loss (often related to protein loss)
- Weakness (often related to metabolic and electrolyte imbalances)
- Lethargy (often related to a build of blood toxins)
- Pale gums (often related to secondary anemia, from failed red blood cell production)
- Blindness (often related to unregulated high blood pressure)
- Not eating or a poor appetite, vomiting, diarrhea

OBTAINING A DIAGNOSIS

Diagnosing **CRF** starts with blood work but also requires urine and blood pressure testing. Ultrasound and x-rays (radiographs) are also used to determine underlying causes.

Utilizing these diagnostic results, the International Renal Interest Society (IRIS) provides criteria for classifying **CRF** patients into a four-stage ranking system. Please see related educational materials at www.iris-kidney.com.

Once diagnosed and stable, patients should be evaluated at least every 6 months to monitor diagnostic parameters. In less stable patients, they may require monthly or bi-weekly evaluations to ensure improvement.

TREATMENT

There is no cure for **CRF**, and depending on each patient's underlying disease, it can become fatal within months to years. The goals of management are to minimize symptoms, maintain appropriate hydration, and reduce the work load on the kidneys. As **CRF** is a progressive disease, patients may require new treatments as new signs develop.

Treatments include:

- Hospitalization with IV (intravenous) fluids and supportive care in advanced or severe cases
- Daily fluids under the skin (subcutaneous fluids), reserved as a maintenance measure once patients are stabilized
- Anti-nausea medications and appetite stimulants
- Oral dietary potassium supplements
- Blood pressure medication(s)
- Prescription kidney diets
    - Lower protein diets of higher quality create less waste for the kidneys to eliminate, lowers phosphorous, and increases salt, potassium, magnesium, and B-vitamins.

TIPS FOR SUCCESS

- There is no cure for **chronic renal failure**, but management allows maintenance for a good quality of life.
- Prescription diets increase survival length and quality of life, while reducing frequency of hospitalization.
- Follow all recheck recommendations and have patient's blood, urine, and blood pressure values checked.