PAW HEALTH NETWORK INC.

RENAL FAILURE - ACUTE

ABOUT THE DISEASE

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

Acute renal failure (ARF), acute **kidney disease (AKD)** and acute **kidney injury (AKI)** all refer to the same condition which results in an abrupt reduction in the kidney's ability to filter the blood and produce urine effectively. If severe enough, some patient may progress to chronic renal failure (CRF). Please see the Renal Failure - Chronic document for additional information.

Common causes of **ARF** include:

- Toxins such as antifreeze, lilies (feline), raisins, and grapes
- Sudden decreases in blood flow, low blood pressure, shock, heart failure, heat stroke, hypothermia, or anesthesia
- Infections like leptospirosis (canine), Lyme disease (canine), bacterial infections, or feline infectious peritonitis

Please see documents under the Cardiovascular System, Infectious Diseases, Toxins and Poisons, and the Urinary System for additional information.

Because the kidneys serve several functions, and the failure may be related to a toxin ingestion, the signs of **ARF** may vary to include one or more of the following:

- Lethargy, depression, vomiting, loss of appetite
- Collapse
- Abdominal pain
- Increased thirst (polydipsia) and increased urine production (polyuria)
- Dehydration
- Less or no urine production (oliguric/anuric renal failure)

OBTAINING A DIAGNOSIS

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

Some patients may require specialty testing to rule out infectious organisms or toxins.

TREATMENT

ARF needs to be treated aggressively. Because of this, the patient is hospitalized in intensive care for monitoring, nursing care, rehydration, and supportive care.

Treatments include:

- Hospitalization with IV (intravenous) fluids and supportive care
- Anti-nausea medications and appetite stimulants
- Blood pressure medication(s)
- Prescription kidney diets
    - Lower protein diets of higher quality create less waste for the kidneys to eliminate, lowers phosphorous, and increase salt, potassium, magnesium, and B-vitamins.

If patients survive **ARF**, they are managed as CRF patients until their renal values have proven stable.

TIPS FOR SUCCESS

- Management for **ARF** is similar to CRF, but requires hospitalization and cannot be treated reliably at home.
- If toxin ingestion is suspected, do not wait for clinical signs to occur.
    - Patients should be treated aggressively so the chances of success can be maximized.