



Acute Renal Failure

Diagnostic Plan

History
Physical examination
Abdominal palpation
Urinalysis
Blood work
Abdominal X-rays
Kidney biopsy

Therapeutic Plan

Fluid therapy
Diuretics
Phosphate binders
Sodium bicarbonate
Drugs to control stomach acidity
Peritoneal dialysis

Nutritional Plan

Nutrition with controlled and appropriate levels of protein, phosphorus, sodium and calories
Omega-3 fatty acids, B complex vitamins, fiber source

Acute Renal Failure

Your pet has acute renal failure. Acute renal failure is a rapid decline in kidney function caused by many diverse processes and diseases. It is treated by removing the cause of the decline, if possible, and supporting the animal's needs with fluids, special nutritional products and sometimes medications. This client education sheet will help you learn more about acute renal failure and will review your veterinarian's instructions for your pet's care at home as well as follow-up with the veterinary health care team.

What You Should Know About Acute Renal Failure

Your pet's kidneys filter and remove waste materials from the bloodstream. The kidneys also regulate the volume and composition of your pet's bodily fluids. Renal failure is an inability of the kidneys to sufficiently perform these functions to prevent the development of clinical signs. Acute renal failure is often a life-threatening disorder.

Causes

There are many causes of renal failure including: blood loss; shock; surgical stress; trauma; severe dehydration; poisons; drugs; and conditions that obstruct urine flow.

Diagnosis

A physical examination often helps your veterinarian diagnose acute renal failure. Bladder stones that obstruct urine flow can often be palpated (an examination by touching), as can an enlarged bladder. Laboratory studies include blood tests and a urinalysis to determine how well the kidneys are filtering and removing wastes from the blood. Your veterinarian may also perform a microalbumin urine test to check for early kidney disease and check your pet's blood pressure because up to 75 percent of dogs and cats with renal disease have high blood pressure. Ultrasound, X-rays of the abdomen and biopsies of the kidney help show causes of acute renal failure and help establish a prognosis.

Treatment and Home Care

Therapy for acute renal failure is tailored to the individual patient but usually includes: hospitalization; intravenous therapy to flush accumulated wastes from the bloodstream to help prevent further accumulation; and therapy to remove

the cause. Many patients recover completely if fluid therapy is instituted and the underlying abnormality treated. Bladder stones lodged in the urethra can be flushed back into the bladder, as can the crystals and debris that obstruct the urethra of male cats affected with feline lower urinary tract syndrome. These procedures reestablish urine flow.

Acute renal failure arising from diseases of the kidney can be treated with medical therapy and dialysis; however, dialysis equipment is rarely found in veterinary hospitals. Medical therapy includes restoring fluid, electrolyte and acid-base balance. Of primary concern is the reestablishment of urine flow. Fluid therapy and drugs called diuretics help accomplish this goal. Other medications may be necessary to help control vomiting, diarrhea and high blood pressure.

Once your pet returns home, it will need special attention and care. It is important to avoid all stress and provide continuous access to fresh, clean water. Follow instructions carefully if your veterinarian prescribed medication for your pet. If your pet has had surgery, you will also need to follow your veterinarian's instructions for care, exercise restriction and suture removal.

It is very important that you keep all appointments for follow-up examinations and laboratory tests.

Nutritional Plan

Even though your pet may recover from acute renal failure in a week or two, the lesions in the kidneys may take months to heal. Because of this, your veterinarian may give you special feeding instructions. Renal failure patients often benefit from foods with reduced amounts of phosphorus, sodium and protein. These special foods help prevent an accumulation of waste materials in the blood and will reduce the workload on the kidneys.

Foods such as Hill's® Prescription Diet® k/d® Canine and k/d® Feline Renal Health are formulated by veterinary nutritionists to reduce the demands on impaired kidneys. These foods contain high-quality protein — but in smaller amounts than in most pet foods — so that the kidneys have less waste materials to eliminate. Because excess phosphorus can contribute to kidney disease, phosphorus is also reduced in these foods. Reduced dietary sodium (salt) has been shown to help maintain normal blood pressure. High blood pressure frequently occurs with kidney failure.

Transitioning Food

Unless recommended otherwise by your veterinarian, gradually introduce any new food over a seven-day period. Mix the new food with your pet's former food, gradually increasing its proportion until only the new food is fed.

If your pet is one of the few that doesn't readily accept a new food, try warming the canned food to body temperature, hand feeding for the first few days, or mixing the dry food with warm water (wait ten minutes before serving). Feed only the recommended food. Don't feed additional salt or any snacks that may contain sodium. Be patient but firm with your pet. This is important because the success or failure of treatment depends to a large degree on strict adherence to the new food.

Presented as an educational service by



Home Care Instructions

Client's Name: _____

Patient's Name: _____

Medication(s): _____

Nutritional Recommendation: _____

Follow-Up Appointment: _____

(Hospital Stamp Area Above)

REGULAR VISITS WILL HELP OUR VETERINARY HEALTH CARE TEAM PROVIDE FOR YOUR PET'S BEST INTEREST.