Partner Veterinary URGENT CARE

Azotemia

Azotemia may occur due to significant dehydration, kidney disease or failure, or urinary obstruction.

When a patient is severely dehydrated, the rate at which the kidneys are able to filter the blood and produce urine slows significantly. Consequently, the urine becomes highly concentrated and products that the kidneys normally excrete build up in the blood stream instead. Given the severity of dehydration necessary to produce azotemia, these patients require hospitalization for IV fluid therapy and supportive care.

Azotemia due to primary kidney disease, often termed kidney injury or renal failure, is associated with a substantial decrease in kidney function. Patients that are azotemic have less than 25% of their normal kidney function. Renal failure may be accompanied by dilute urine, frequent large volume urination, and increased thirst. Other clinical signs of renal failure include lack of appetite, vomiting, and lethargy.

Urinary obstruction is the final category of azotemia. In our patients, the most common manifestation of urinary obstruction is the inability to urinate due to urethral or bladder obstruction (stones, tumors, urethral spasm, inflammatory sediment or debris). The inability to urinate is a life-threatening emergency and emergent transfer to an ER is advised. Less commonly, patients may have a ureteral obstruction (blockage of one of the tubes that carries urine from the kidneys to the bladder). These patients require advanced imaging, intensive care, and may require referral to a tertiary center for procedures to alleviate the ureteral obstruction.