Two cases of unilateral renal agenesis in a dog and a cat

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Reports of unilateral renal agenesis in dogs and cats are rare. Clinically, unilateral renal agenesis is asymptomatic unless associated extrarenal defect cause signs or the other kidney is injured by acquired disease so that uremia develops.

A five-year-old, intact female, Chihuahua was referred to Veterinary Medical Teaching Hospital, Seoul National University because laboratory tests was mild azotemia. There was no clinical sign. On blood work, BUN level was 36.2 mg/dl. In abdominal radiographs, round mass with soft tissue opacity was found in mid-caudal abdomen and the right kidney was not identified. Abdominal ultrasonographydemonstrated that the soft tissue mass in radiographs was pyometra and the left kidney had mild pelvic dilation. Excretory urography revealed the normal shape and opacification pattern of the left kidney. However, there was no evidence of existence of the right kidney. When we performed ovariohysterectomy, the right kidney and the right ureter were not found.

A nine-month-old, intact female, domestic short haired-cat was admitted for three-day history of acute vomiting, depression, and shivering. There was azotemia with BUN level 74.0 mg/dl and creatinine level 4.5 mg/dl on the routine blood screening test. The right kidney was not identified and the left one was enlarged in the abdominal radiographs. Abdominal ultrasonography demonstrated a minimally enlarged right uterine horn filled with anechoic fluid. Excretory urography revealed the normal shape and opacification pattern of the left kidney meaning the normal physiological activities, however, there was no evidence of the right kidney. The patient had gone through ovariohysterectomy and there were no the distal part of the right uterine horn, the right kidney, and the right ureter.

Unilateral agenesis of kidney is very rare so that clinical importance is not highly considerable for small animals. But for patients, management after initial diagnosis is necessary.

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