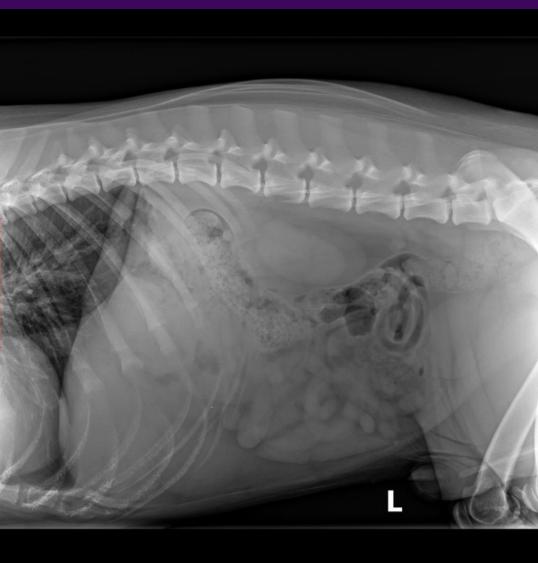
Foundations of Urogenital Radiology Case Companion Workbook

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Fall 2020

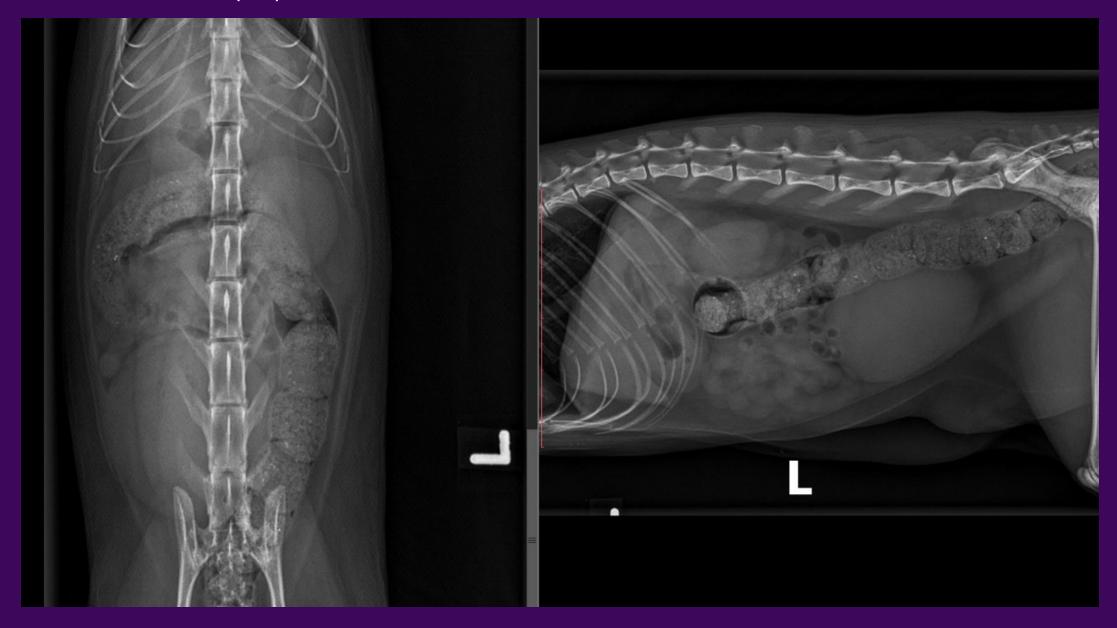


Normal abdomen (dog)





Normal abdomen (cat)



Changes in Renal Roentgen signs Size, Shape, Margin, Opacity (location, number)

Size

- Enlarged
 - Fluid
 - Hydronephrotic
 - Cystic
 - Perirenal fluid
 - Solid
 - Neoplasia
 - Hematoma
 - Mixed
 - Abscess
 - Hemorrhage + Hematoma
- Small
 - Congenital
 - Acquired

Shape

- Round
- Oval
- Lobulated

Opacity

- Mineralized
 - Linear
 - Rounded

Margin

- Smooth
- Irregular
 - Indentation
 - Scar from infarct
 - Elevation/bulge
 - Tissue proliferation
 - Cyst



Differential Diagnoses based on size and margin:

Mildly enlarged kidney, smooth margin

Bilateral

- Acute renal injury
- Acute pyelonephritis
- Congenital portosystemic shunt
- Amyloidosis
- Acromegaly

Unilateral

- Compensatory hypertrophy
- Renal neoplasia (except lymphoma)
- Subcapsular abscess/hemorrhage

Enlarged kidney, irregular margin

Bilateral

- Metastatic neoplasia
- Polycystic kidney disease
- Feline infectious peritonitis

Unilateral

- · Primary renal neoplasia
- Metastatic neoplasia
- Renal abscess
- · Renal hematoma
- Renal cysts
- Renal granuloma

Markedly enlarged kidney, smooth margin

Bilateral

- Hydronephrosis
- Renal lymphoma
- Feline infectious peritonitis
- Feline perinephric pseudocysts

Unilateral

- Hydronephrosis
- Renal tumor
- Subcapsular hematoma or abscess
- Perinephric pseudocyst

Small kidney, smooth or irregular margin

<u>Bilateral</u>

- Chronic renal disease
- Developmental hypoplasia or dysplasia

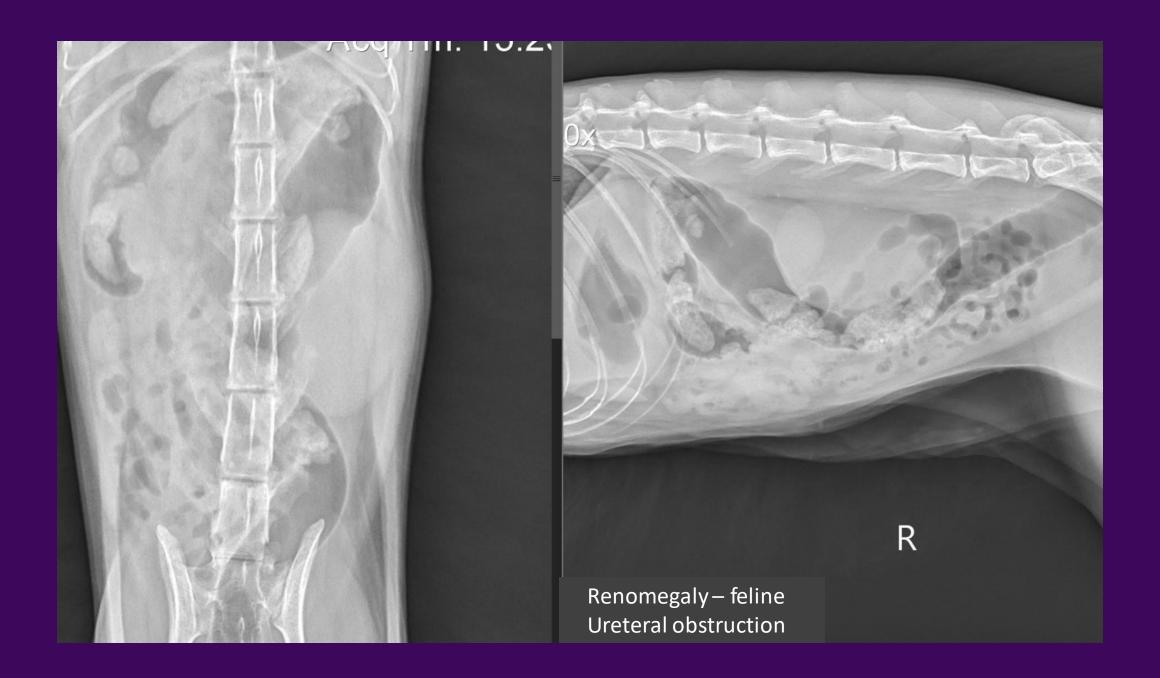
Unilateral

- Chronic renal disease
- Atrophy secondary to obstruction

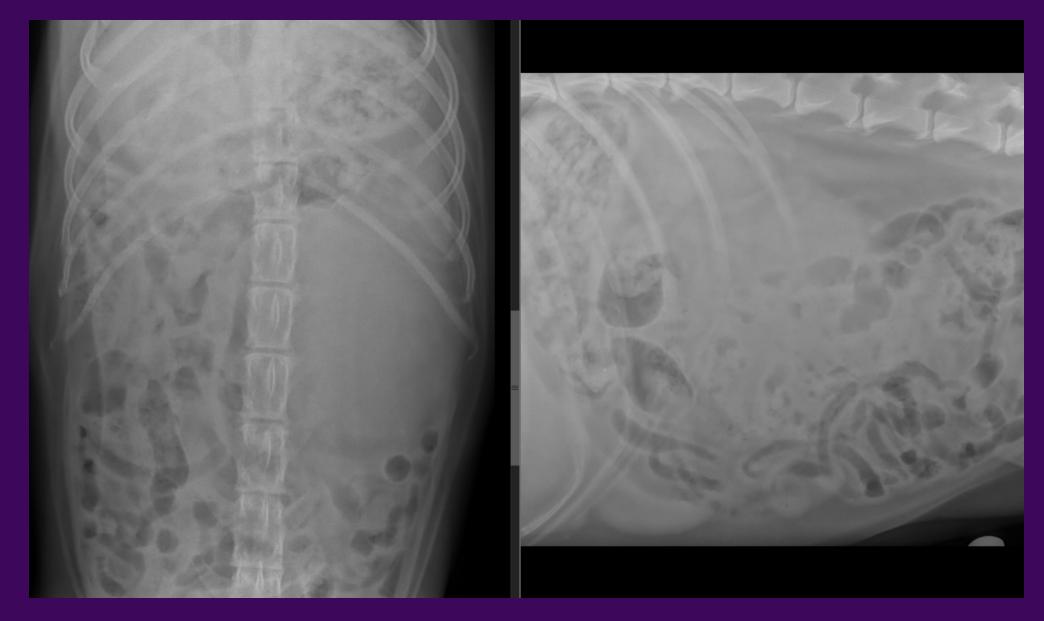


Reference: Thrall 2013 - Chapter 38

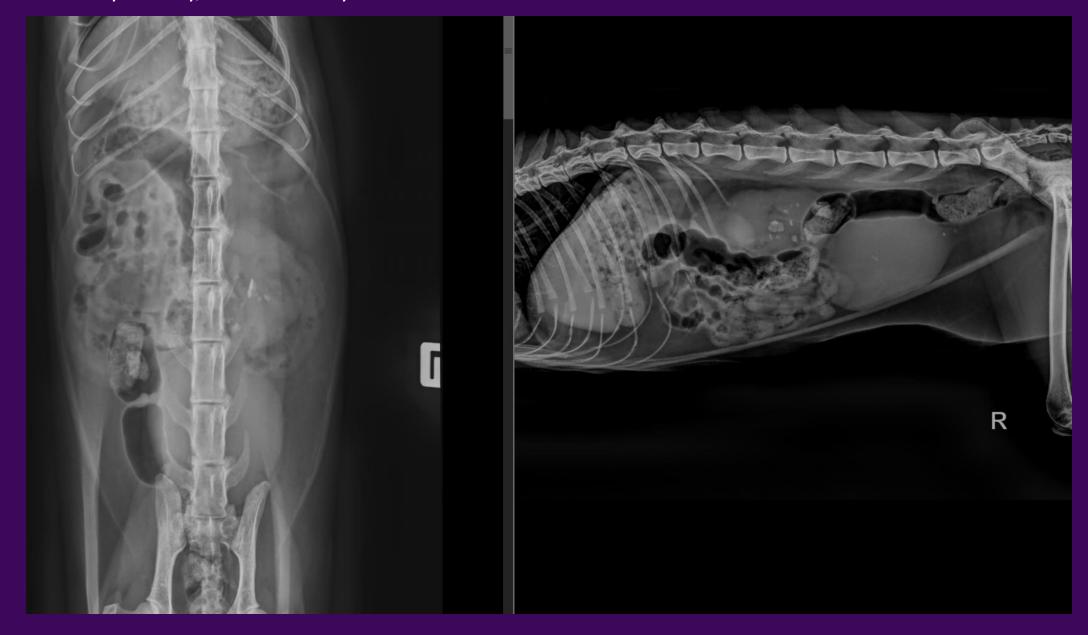
Slide adapted from Alex zur Linden DVM, DACVR



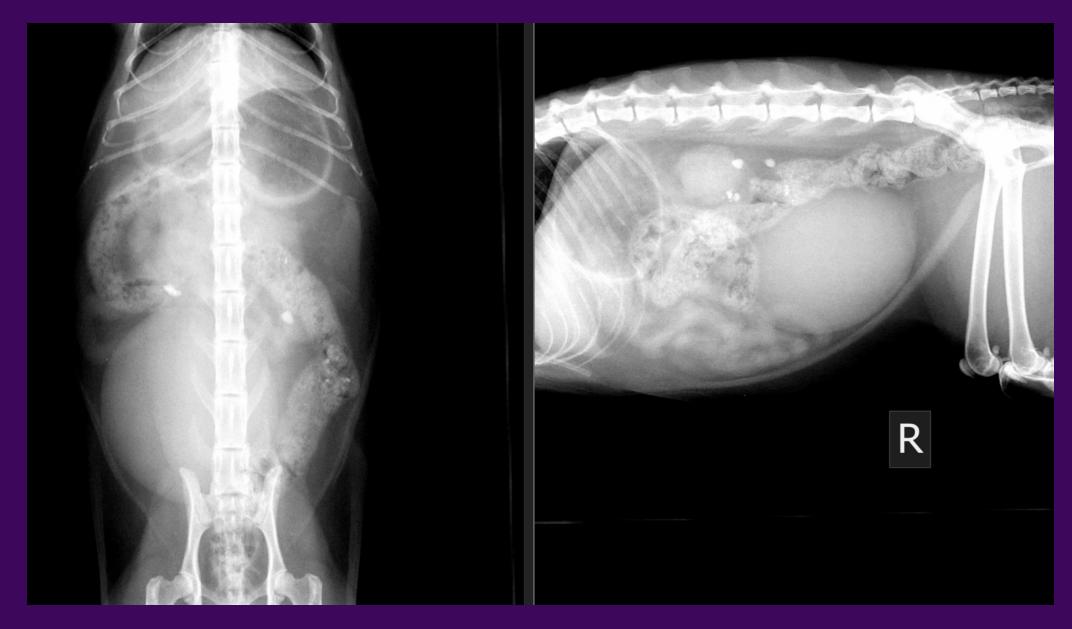
Left Renomegaly – renal mass



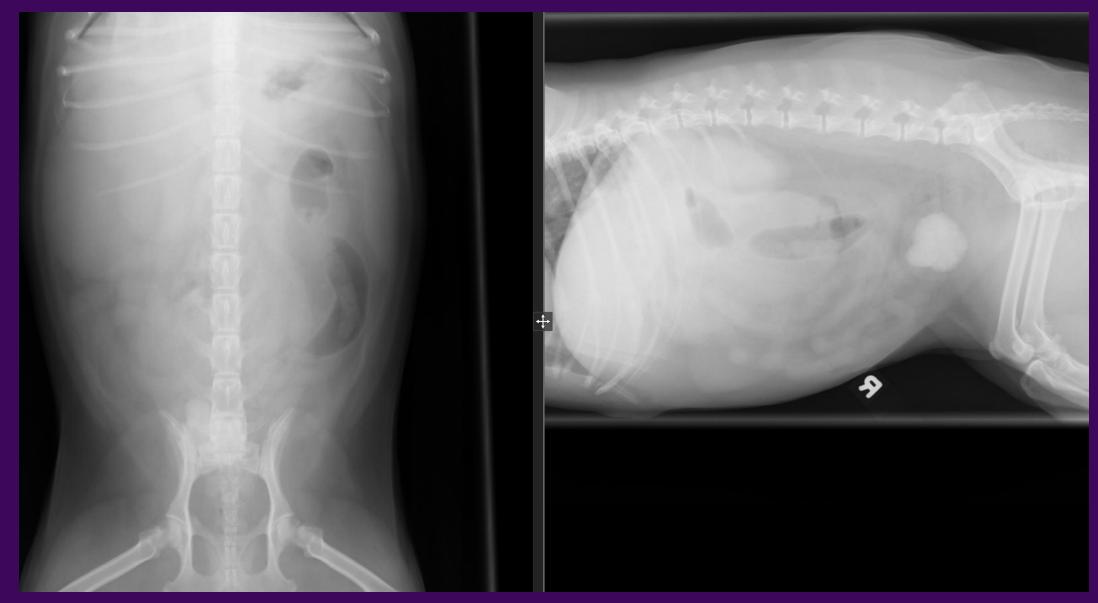
Renal asymmetry, chronic kidney disease



Chronic kidney disease (CKD)



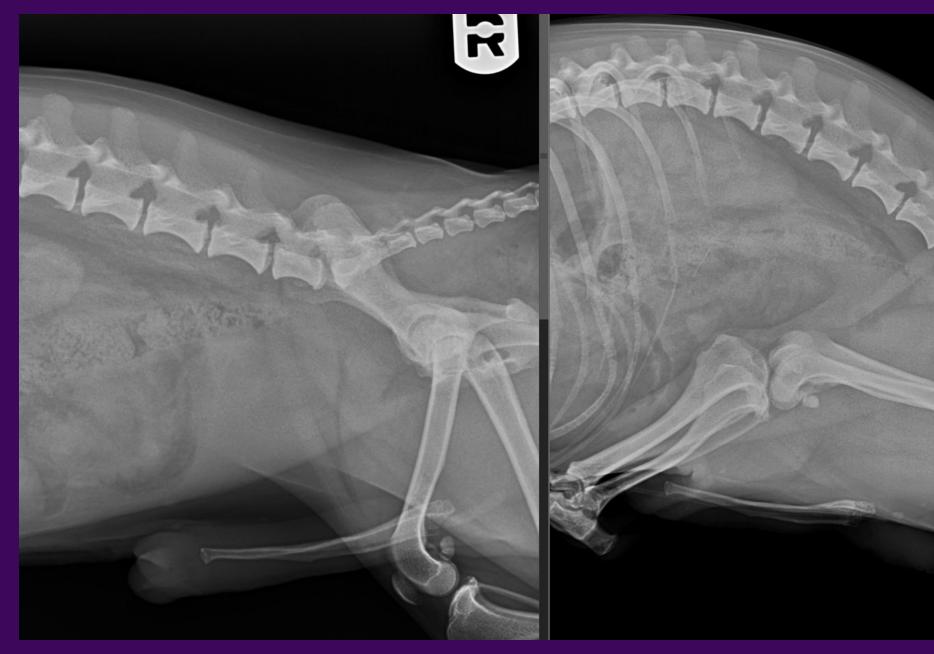
Cystolith
Right cranial abdominal mass (hepatic mass)



Cystoliths, ureterolith, urinary catheter



Flexed leg lateral for urethral evaluation



Prostatomegaly



Prostatomegaly, urethroliths



Retropulsed urethroliths and prostatomegaly



Normal pregnancy



Pyometra

