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Case 2

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Prepared by Drs. Ana Pinto and Chee Kin Lim

Signalment and History

- 17 year old female spayed Maine Coon
- Vomiting, diarrhea, and anorexia for three days
- History of hyperthyroidism – currently on methimazole
- Hypertensive
- Physical exam- Grade IV/VI heart murmur, moderate muscle wasting

Abdominal radiographs are available.

- 1) Describe your radiological findings**
- 2) List your diagnosis/differential diagnosis**





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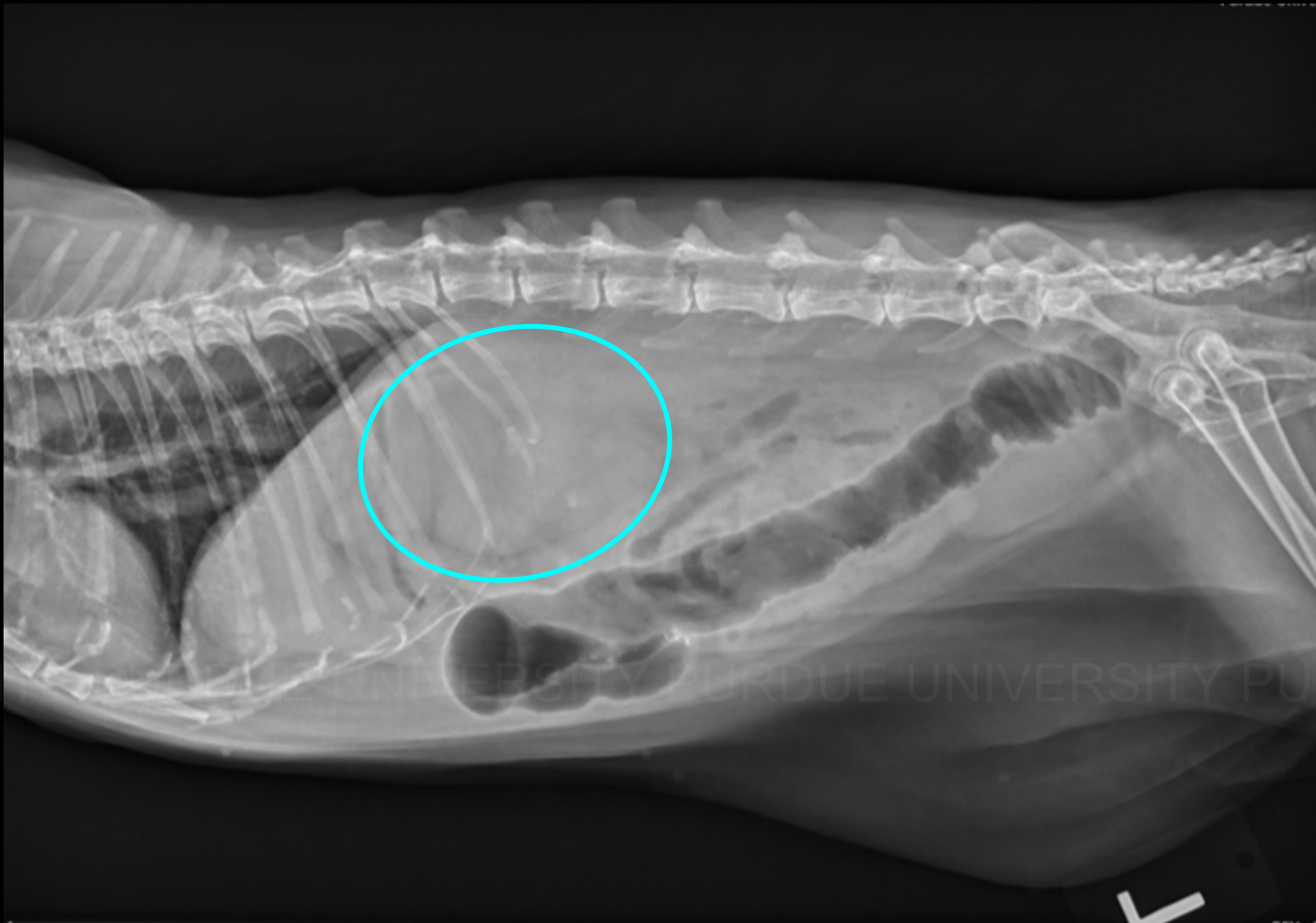
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Radiological Findings

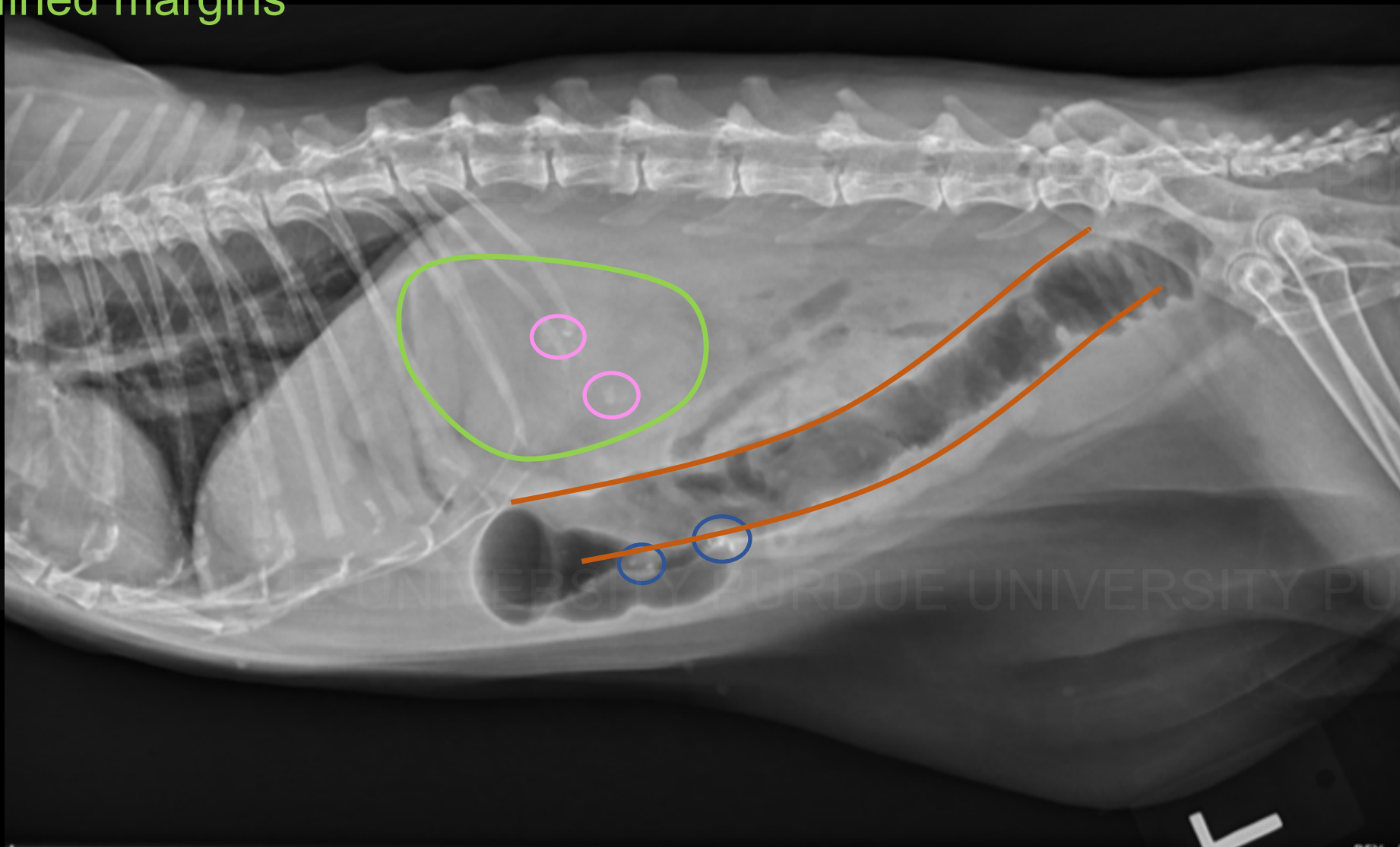
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Poor serosal margins at the cranial to middorsal abdomen

Enlarged right kidney with poorly defined margins

Mineral opacity superimposed over kidneys



Ventral displacement of colon

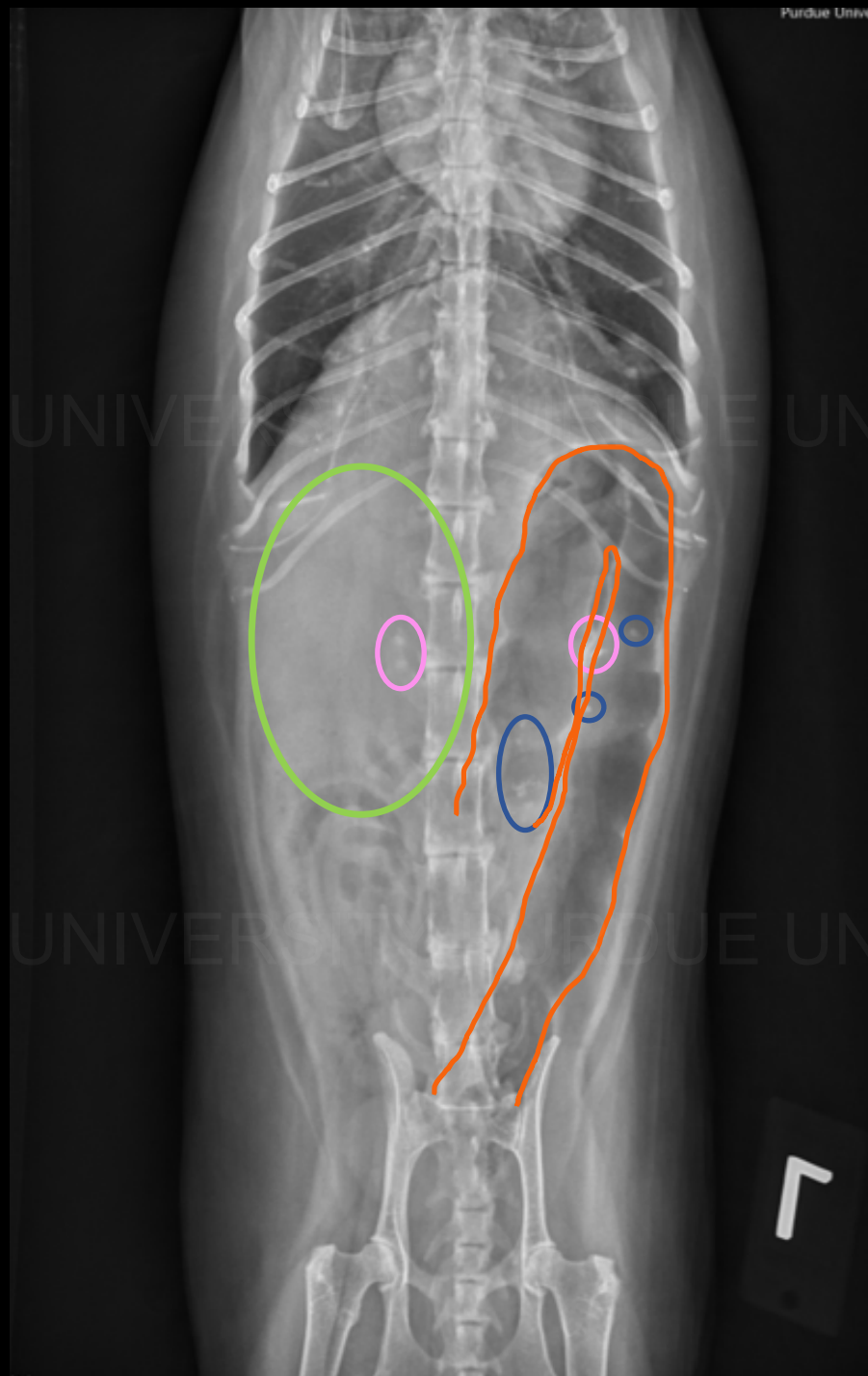
Mineral opacity in the colon

Enlarged right kidney
with poorly defined
margins

Colon displaced to
the left

Mineral opacity
superimposed over
kidneys

Mineral opacity
in colon



Differentials

- Right renomegaly with probable retroperitoneal effusion, causing displacing colon and poor serosal margins
 - Acute renal failure
 - Hydronephrosis
 - Renal neoplasia
 - Perirenal/Perinephric Pseudocyst
- Mineral foci superimposing kidney
 - Nephroliths
 - Dystrophic mineralization of the renal diverticula

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Final diagnosis

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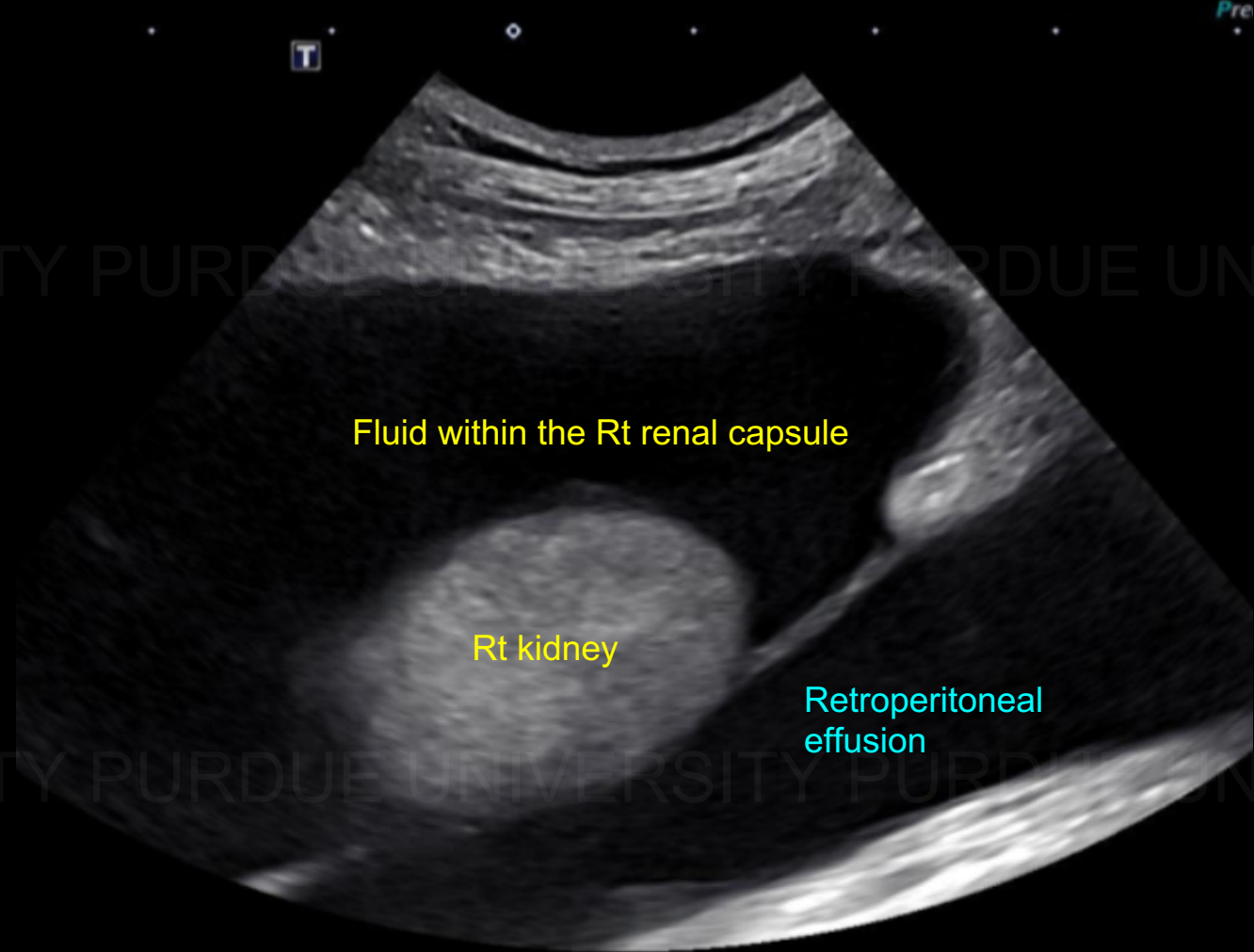
- **Ultrasound**

- Large right perinephric pseudocyst
- Small left perinephric pseudocyst
- Bilateral nephroliths
- Mild bilateral renal pyelectasia
- Moderate amount retroperitoneal effusion

- **Fluid aspiration**

- 80 ml removed
- Transudate

- **Clinically diagnosed as stage 1 CKD**



Remarks

- Perinephric pseudocyst – subcapsular fluid accumulation in the kidney
- Causes renomegaly and abdominal distention
- More common in old male cats
- Can be unilateral or bilateral
- 3 types:
 - I. Intracapsular – transudate between renal capsule and renal parenchyma (most common in cats)
 - II. Extracapsular- transudate between the renal capsule and the lining of retroperitoneum
 - III. Perirenal urinoma – due to urine leakage leading to inflammatory response of the retroperitoneum tissues and formation of fibrous wall/capsule around the leakage

References

1. Beck, J., Bellenger, C., Lamb, W., Churcher, R., Hunt, G., Nicoll, R., Malik, R., 2000. Perirenal pseudocysts in 26 cats. *Aust. Vet. J.* 78, 166–171. <https://doi.org/10.1111/j.1751-0813.2000.tb10585.x>
2. Essman, S.C., Drost, W.T., Hoover, J.P., Lemire, T.D., Chalman, J.A., 2000. Imaging of a Cat with Perirenal Pseudocysts. *Vet. Radiol. Ultrasound* 41, 329–334. <https://doi.org/10.1111/j.1740-8261.2000.tb02082.x>