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RADIOLOGY
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Binturong

RADIOLOGY REPORT

Patient Information

Patient:	[redacted]	Patient ID:	[redacted]	Report Number:	25681
Patient Birth Date:		Age:		Gender:	F
Study Description:		Accession:	[redacted]	Study Date:	20201021
Species:		Breed:		Modalities:	CT
Sedation Used:	No	Anesthesia Used:	No	Submitted By:	[redacted]
Facility:	[redacted]	Submitted:	2020-10-22 13:13:07 UTC	Finalized:	2020-10-24 05:17:33 UTC

Annotated Images Requested: No

STAT Request: 0

Anatomical Region:

History

CT performed today with 3 post-contrast scans specifically to enhance the ability to comment on the reproductive structures. [redacted] female Binturong examined during quarantine exam. Returned to [redacted] n a breeding recommendation. Previous institution had no success with successful breeding. CT performed today with 3 post-contrast scans specifically to enhance the ability to comment on the reproductive structures.

Findings

Helical CT volume data of the head/neck, thorax, and abdomen was acquired pre- and multiple times post-intravenous administration of iodinated contrast medium. Image reformats are available in soft and sharp reconstruction algorithms, in a transverse plane. The patient is intubated and positioned in sternal recumbency for image acquisition. No prior CT is available for comparison.

Number of images: 5891
Anatomy evaluated: Head/neck, thorax, abdomen/pelvis
Length of scan field of view: 97 cm

- HEAD/NECK: There is mild multifocal soft tissue attenuating thickening closely associated with nasal turbinate bones, as well as minimal multifocal turbinate bone hyperostosis. The right mandibular first premolar tooth is absent. The dentition and oral cavity are otherwise unremarkable. No significant abnormality is identified associated with the oro-/naso-pharynx or larynx; eyes and adnexal soft tissues; lymphatic and salivary structures of the head; external or middle ears; brain or intracranial ventricular system; left or right lobes of the thyroid gland; or remaining soft tissue or osseous structures of the head and neck.
- THORAX: Throughout the lungs there is faint, patchy/multifocal pulmonary hyperattenuation which coalesces cranioventrally on the left to a poorly defined heterogeneous alveolar pattern with subpleural banding along the lateral margin of the left cranial lobe. Within the caudal aspect of the left caudal lobe there is an area of linear hyperattenuating parenchymal banding. Within the craniodorsal periphery of the left cranial lobe there is faintly hyperattenuating, obliquely oriented parenchymal banding. The intrathoracic lymph nodes identified exhibit normal features. No cardiovascular abnormality is identified.
- ABDOMEN/PELVIS: No significant hepatic abnormality is noted. The gallbladder contains a small amount of suspended, soft tissue attenuating debris. The cystic duct is prominent, measuring up to 7 mm in diameter, but abruptly tapers to minimal diameter. Immediately adjacent to the expected level of the duodenal papilla there is a focal, 1 cm cystic nodule, presumably at the terminus of the bile duct. The pancreas is diffusely lobular, however, the peri-pancreatic mesentery is unremarkable. Throughout the small intestine there is slightly heterogeneous fluid and there is the impression of mucosal irregularity, however, this is poorly evaluated on the current modality. Multiple mesenteric lymph nodes exhibit a lobular contour and are prominent, measuring up to 1.3 cm in thickness. The left uterine horn is tortuous and diffusely mildly to moderately dilated with slightly heterogeneous fluid (~5 HU). The right uterine horn is non-uniform in diameter/lobular, and exhibits multifocal poorly defined hypo-enhancing foci, cranially. Within the cranial aspect of each the right the left

ovary there is a well defined fluid filled cyst measuring 6.9 mm and 5.0 mm, respectively. The regional mesentery is unremarkable.

Impressions

- Tortuous and moderately fluid dilated left uterine horn.
- Thickened right uterine horn with a cystic appearance cranially.
- Right and left ovarian cysts measuring 6.9 and 5.0 mm, respectively.
- 1 cm cyst at the terminus of the bile duct, without evidence of an extrahepatic biliary obstruction - see comment.
- Lobular pancreas with normal peri-pancreatic mesentery - in light of the absence of evidence of regional steatitis, this is most likely a species related anatomic variant of appearance of little clinical significance, however, early or mild acute pancreatitis may be possible.
- Impression of small intestinal mucosal irregularity and multisegmental fluid contents - compatible with enteritis or potentially an incidental post-prandial variant of appearance.
- Prominent mesenteric lymph nodes - equivocal for reactive hyperplasia.
- Multifocal/patchy interstitial pulmonary pattern and scant ventral alveolar pattern, on left - in the absence of relevant respiratory clinical signs this appearance is most likely compatible with anesthesia-associated pulmonary atelectasis. Multifocal plate-like atelectasis is an additional pulmonary change of without clinical significance.
- Absent right mandibular first premolar.
- Mild non-destructive rhinitis, likely chronic.

The described uterine abnormalities raise concern for left-horn pyometra, mucometra, or hydromedra, with evidence of concurrent right horn cystic endometrial hyperplasia. Typically, US-guided sampling of uterine fluid is not recommended to reduce the risk of iatrogenic septic peritonitis. Consequently, empiric medical therapy or exploratory laparotomy should be considered.

In the absence of additional evidence of an extra-hepatic biliary obstruction, the cystic nodule/dilation at the terminus of the bile duct if of unknown clinical significance, but may potentially be compatible with biliary cystadenoma, congenital biliary cyst, or potentially a cyst of adjacent pancreatic origin. These abnormalities may potentially be better assessed via abdominal ultrasound (or concurrently during exploratory surgery).

Figures:

- Figure 1 - Dorsal plane MIP demonstrating the fluid dilated left uterine horn.
- Figure 2 - Dorsal plane MIP demonstrating thickening of the right uterine horn.
- Figure 3 - Sagittal plane MIP of left ovary with 5.0 mm cyst.
- Figure 4 - Sagittal plane MIP of right ovary with 6.9 mm cyst.
- Figure 5 - Transverse image of the cystic nodule at the terminus of the bile duct (short arrows) adjacent to the duodenum (long arrow).

Recommendations

Report on 2020-10-24 05:17:33 UTC signed by:

Philip Hamel

Philip (PJ) Hamel, DVM, MPH, DACVR

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FIg 1 - Left uterine horn.png

Fig 2 - Right uterine horn.png

Fig 3 - Left ovary.png

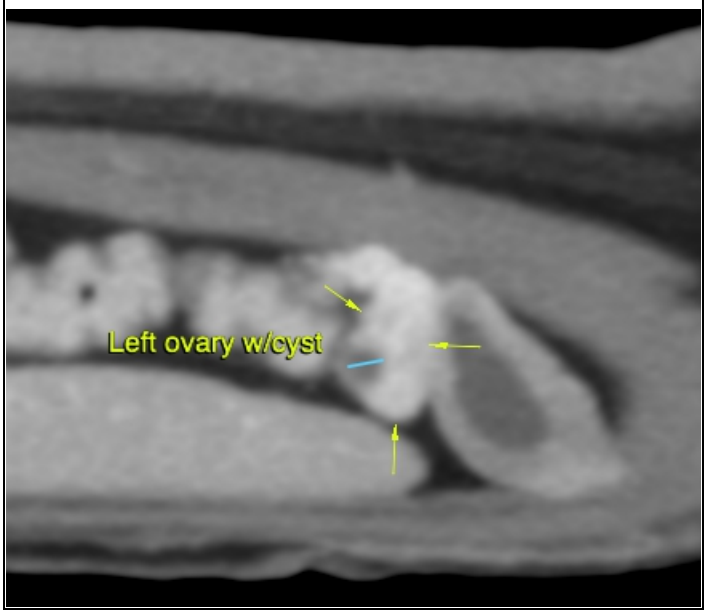

Fig 4 - Right ovary.png

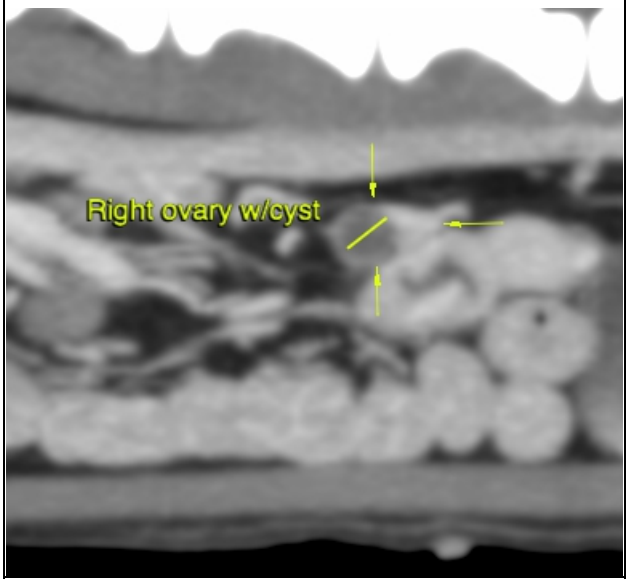

Fig 5 - Terminal bile duct cyst.png