



**PATIENT PRESENTING CLINICAL SIGNS**

Riley Keller Had a liver mass removed two years ago that was benign. Recently had TPLO surgery and subsequently had some concerns (lethargy) post-op. Bloodwork showed liver enzymes elevations and FNA was done of liver that reported carcinoma

**SPECIES COMPUTED TOMOGRAPHY OF THE SKULL, THORAX AND ABDOMEN**

Canine A high resolution plain CT study of the skull and a pre- and post-contrast CT study of the thorax and abdomen are provided for review.

**BREED COMPUTED TOMOGRAPHIC FINDINGS**

Springer Spaniel Skull

The tooth elements 108, 203 and 309 are absent.

**SEX** The nasal cavity presents the expected aerated spaces between thin & even conchae and turbinates with smooth mucosal lining.

MC Both temporomandibular joints present congruent joint spaces with even subchondral bone surfaces and are considered within normal limits.

**AGE** Both tympanic bullae are aerated, the mucosal lining is not seen, the bony wall is smooth and thin. The external ear canals are within normal limits.

12 The submandibular and medial retropharyngeal lymph nodes are small and elongated with a normal short-to-long-axis-ratio is < 0.5, the attenuation pattern is uniform.

**INTERPRETED BY**

Sebastian Schaub, DVM  
Dr. med. vet. DipECVDI

Thorax

Multiple variable sized lipomas are seen along the thoracic & abdominal wall. A subcutaneous nodule, measuring 2.1 x 1.5 cm in size is seen at the medioproximal aspect of the right brachium.

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The sternal, cranial mediastinal and tracheobronchial lymph nodes are small elongated with a normal short-to-long-axis-ratio is < 0.5, the attenuation pattern is uniform and considered within normal limits.

The bronchial tree presents with regular branching and tapers uniformly towards the periphery as expected, the bronchial walls are thin and smooth. The bronchus-to-artery ratio is within normal limits.

**REFERRING VET**

Dr. Schwanebeck

Compression atelectasis of the caudodorsal dependent aspects of the lung parenchyma is seen. In the laterodorsal aspect of the left caudal lung lobe, level with the 7<sup>th</sup> left rib, a well-defined, roundish gas containing lesion, demarcated by a thin contrast enhancing capsule is visible. The remainder of the lung parenchyma present the expected architecture and attenuation behavior.

**INVOICE**

51802

Small incidental gas pockets are seen within the esophageal lumen, there is no evidence of abnormal dilation.

**DATE**

4-28-22

Abdomen

The serosal fat presents normal attenuation behavior. There is no evidence of peritoneal effusion or peritonitis. In the cranioventral abdomen, two nodular mesenteric soft tissue attenuating nodules, measuring up to 9 mm in size are appreciated.

Both kidneys present within normal limits for size, shape and organ architecture. After contrast



**PATIENT** administration a bilaterally symmetric and uniform nephro- and pyelogram is noted.

Riley Keller The adrenal glands are within normal limits for size, shape and organ architecture.

The spleen is prominent and multifocal throughout the splenic parenchyma, mild heterogeneous mineralized lesions are noted.

**SPECIES**

Canine Originating from the left medial liver lobe, an irregular roundish, heterogeneous contrast enhancing mass is protruding caudally into the peritoneal cavity, measuring 7.1 x 7.7 x 8.4 cm in size. The stomach is distorted by the mass effect. Multifocal throughout the hepatic parenchyma, well-defined, roundish parenchymal filling defects, measuring up to 4.5 cm in size.

**BREED**

Springer Spaniel The pancreas is evenly contoured, the pancreatic parenchyma is homogeneous and presents uniform contrast enhancement.

The position, delineation, wall and content of the gastrointestinal tract are considered within normal limits throughout.

**SEX**

MC Multiple intervertebral discs of the lumbar spine are mildly protruding into the vertebral canal, distorting the ventral epidural space.

**AGE**

12 Both coxofemoral joints present moderate osteophyte new bone formation. The acetabular groove bilaterally is shallow, and the center of the femoral heads is lateral to the dorsal acetabular rim.

**COMPUTED TOMOGRAPHIC DIAGNOSIS**

- Hepatic soft tissue mass left lateral liver lobe
- Nodular mesenteric lesions cranioventral abdomen
- Mild mineralization splenic parenchyma
- Mesenteric nodular lesions cranioventral abdomen
- Multifocal mild intervertebral disc protrusions along the lumbar spine
- Multiple hepatic cysts
- Multiple lipomas along the thoracic and abdominal wall
- Compression atelectasis caudodorsal dependent aspects of the lung
- Bulla left caudal lung lobe
- Degenerative osteoarthritis coxofemoral joints bilaterally, due to hip dysplasia
- No evidence of pulmonary metastatic disease
- Multiple absent teeth

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INVOICE**

51802 The hepatic mass is consistent with primary hepatic neoplasia, due to the different architecture in comparison to the previous mass it might present a different entity – such as hepatocellular adenoma/carcinoma, neuroendocrine tumor, other. Ultrasound guided FNA sampling can be used as advanced diagnostic tool. Complete surgical excision of the hepatic mass by lobectomy of the respective liver lobe appears feasible.

**DATE**

4-28-22 The mesenteric nodules in the cranioventral abdomen might present granuloma formation due to preceding surgery, aberrant lymphatic tissue or less likely peritoneal metastasis.

The mild mineralization of the splenic parenchyma is likely a sequela to chronic nodular hyperplasia or splenitis. FNA sampling of the spleen can be used to rule out malignant cellular

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**PATIENT** infiltration.

Riley Keller

**SPECIES**

Canine

**BREED**

Springer Spaniel

**SEX**

MC

**AGE**

12

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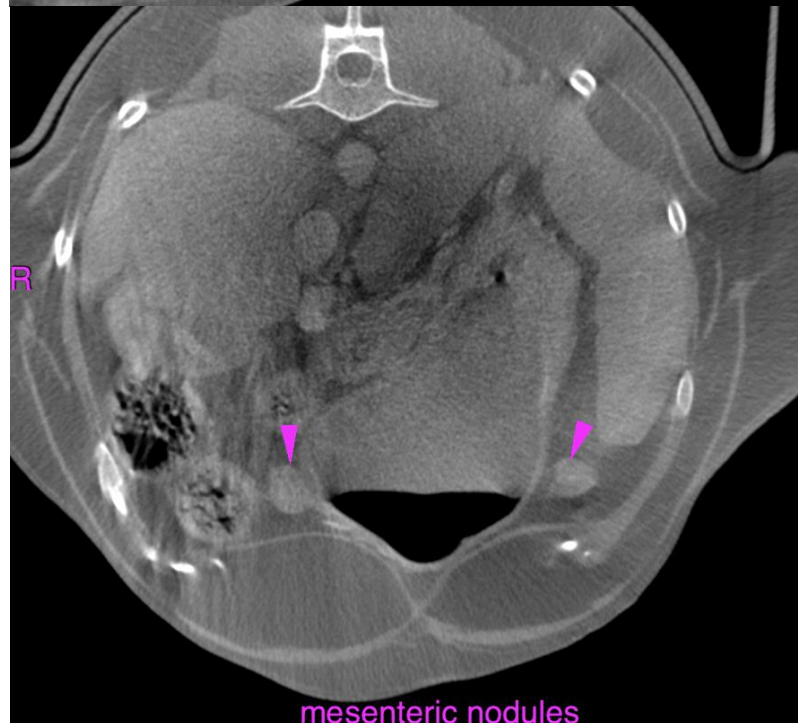
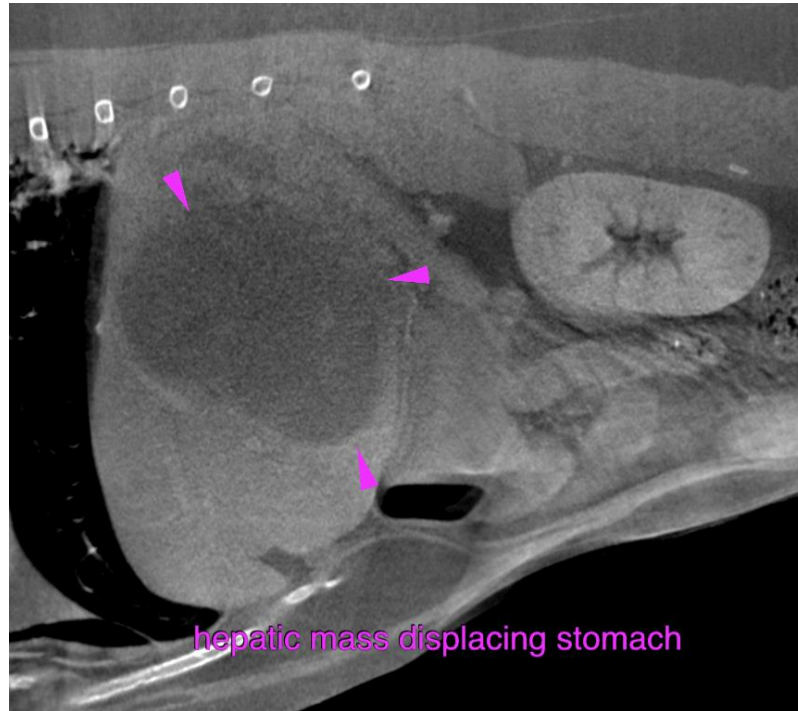
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**PATIENT**

Riley Keller

**SPECIES**

Canine

**BREED**

Springer Spaniel

**SEX**

MC

**AGE**

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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