IT'S YOUR CASE

Species: Canine Breed: Labrador Retriever Sex: Male Entire Age: 10.5 years

Clinical History:

Patient presented for being hit by car about 45 minutes before presentation. A witness noted that the patient was hit in the rear. He is unable to stand. Free fluid found in cranial abdomen around the liver seen on AFAST ultrasound.

Anatomic regions: Pelvis/tail, Abdomen

Details of study and technical comments: A radiographic study of the abdomen and pelvis is presented for evaluation. The study consists of right and left lateral views as well as a ventrodorsal view of the abdomen as well as lateral and ventrodorsal views of the pelvis.

Diagnostic interpretation:

ABDOMEN:

The abdomen is pendulous There is reduced abdominal serosal contrast with fat stranding along the falciform fat and marked reduction in the caudoventral abdomen (red arrows). Soft tissue stranding is in the retroperitoneal space (dark blue arrows).

The visible margins of the liver and spleen are radiographically within normal limits. Superimposed of the hepatic silhouette, faint mineral opacity lies in the region of the gallbladder (orange arrow); this is not identified on the ventrodorsal view.

The gastric silhouette contains gas and minimal heterogenous soft tissue; it is normal in position.

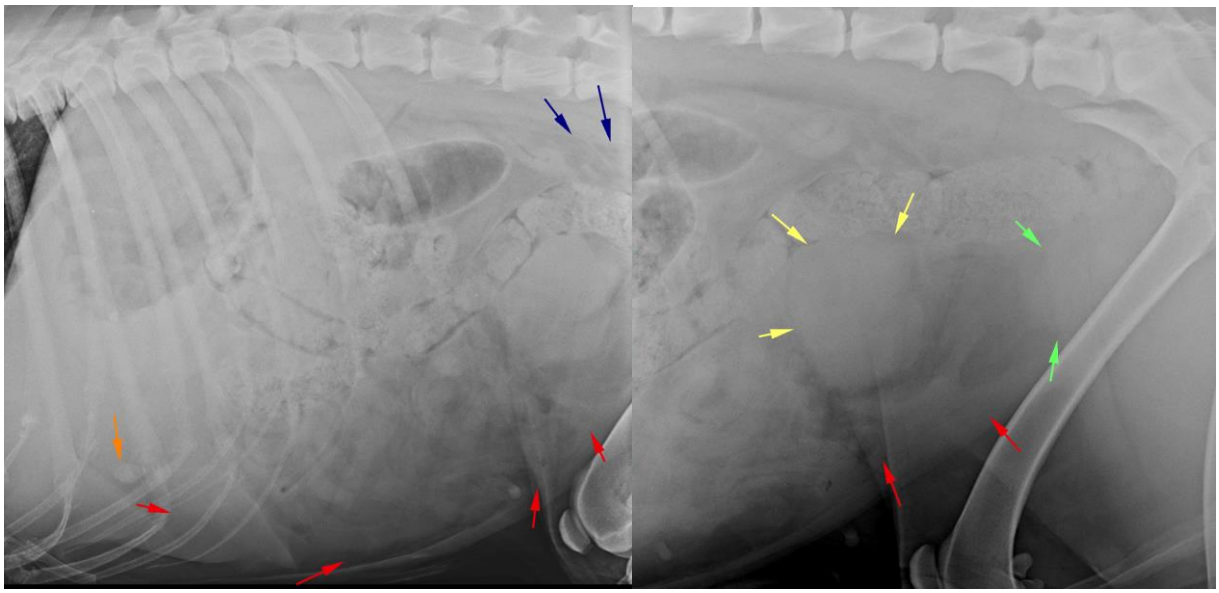
The small intestine is generally soft tissue opaque or contains a small amount of gas; it is within normal limits for diameter and margination. The caecum is gas filled. Faecal material is in the descending colon and rectum.

A round, soft tissue focus in the caudal abdomen is surrounded by faint fat and lies ventral to the descending colon (yellow arrows); this may represent the urinary bladder. The caudal margins of a round soft tissue structure are noted near the pelvic inlet (bright green arrows); this may represent the caudal margin of the prostate. There is poor distinction of the urethra in the caudal abdomen.

t. +44 (0)1223 422251 www.vet-ct.com e. info@vet-ct.com

Co Number 6955449 Registered Office St John's Innovation Centre Cowley Road Cambridge CB4 0WS UK

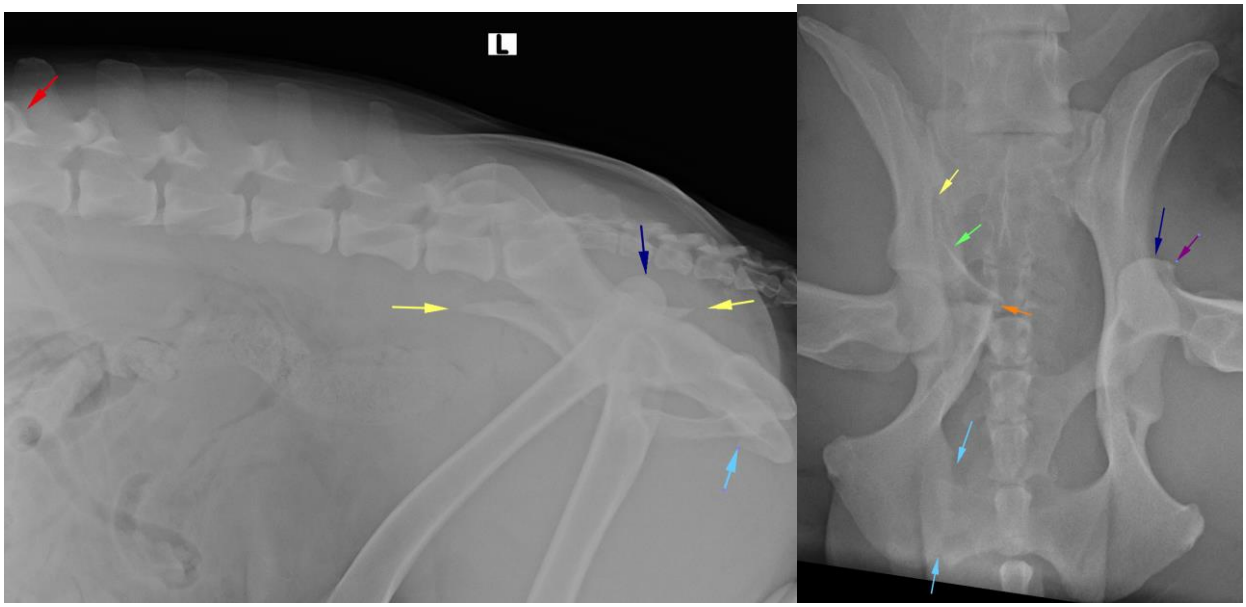
ABN 24601862220 Registered Office in Australia Suite 11, 185-187 High Street Fremantle WA 6160 Australia



MUSCULOSKELETAL:

The articular process joint of L1 and L2 is poorly defined and mildly remodelled (red arrow).

An articular fracture bisects the right acetabulum (orange arrow). There is foreshortening of the right ilial body on the ventrodorsal view (yellow arrows) due to a comminuted long oblique fracture that communicates with the acetabular component. The medial fragment is axially displaced (bright green arrow). A parasagittal fracture of the right ischium is cranially displaced (light blue arrows). The left femoral head is cranially dorsally displaced (dark blue arrow). Minimal remodelling is present at the cranial boundary of the left femoral head (purple arrow). There is moderate regional soft tissue swelling



Conclusions:

Abdomen:

- Generalized loss of serosal contrast, including retroperitoneal effusion. This is consistent with described effusion. Potential sources include haemorrhage or rupture of the urinary tract. Gastrointestinal perforation is considered less likely but not excluded.
- Poor delineation of the distal urinary tract.
- Possible gallbladder sediment.

Musculoskeletal:

- Comminuted right ilial fracture with articular acetabular fracture.
- Right ischial fracture.
- Left coxal luxation.
- Minimal left femoral remodelling.
- Bilateral shoulder osteoarthrosis.
- Suspect articular process joint remodelling at L1 and L2.

Additional comments:

The principal findings of concern include the loss of serosal contrast in the retroperitoneal and peritoneal spaces as well as the articular fracture of the right acetabulum.

The reduced contrast in the caudoventral abdomen heighten the concern for haemorrhage or uroabdomen. This can be more thoroughly explored with a positive contrast cystourethrogram. Alternatively, computed tomography for further evaluation can be made. This may also assist surgical planning of the pelvis.

The findings in the pelvis can account for inability to stand as both weight-bearing axes are impacted. The presence of an axially positioned fragment can result in compromise of the rectal wall or urethra.