IT'S YOUR CASE

Species: Canine Breed: Crossbreed, small Sex: Female Entire Age: 1 year

Clinical History:

She was attacked by pitbull 30 minutes prior to presentation. She was previously healthy. There is tissue is protruding from bite wounds.

Anatomic regions: Abdomen

Details of study and technical comments: A right lateral and VD view of the thorax and abdomen are available for interpretation.

Diagnostic interpretation:

THORAX:

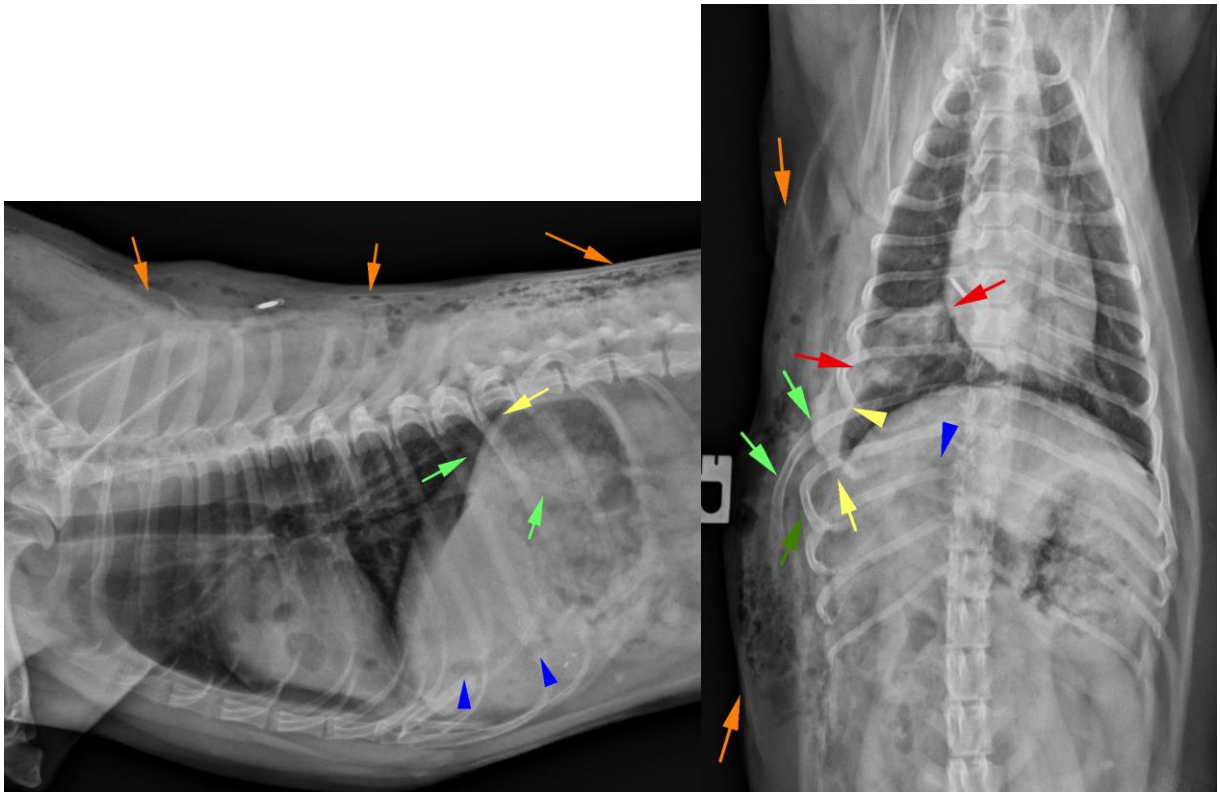
The cardiac silhouette is normal to mildly small in size. The cardiac shape is normal. The pulmonary vasculature is normal. Summating with the cranial aspect of the right caudal lung lobe is a broad band of heterogenous soft tissue opacity, which causes a lobar sign with the right middle lung lobe and extends towards the right lateral margin of the thorax at the level of the 8th to 9th intercostal space (red arrows). The right caudal lung lobe is retracted from the thoracic wall (yellow arrowhead) and caudally rounded (yellow arrows). The right caudal pleural space is widened by soft tissue attenuating material and a small amount of gas. The cardiac silhouette is mildly leftwards shifted.

The right 9th rib is abnormal in shape and extended laterally into the right thoracic wall (bright green arrow). The 10th rib is at the ventral aspect mildly angled (dark green arrow). The left ribs are intact and normal in position.

The right thoracic and cranial abdominal wall is severely thickened and contains large amounts of gas (orange arrows). A large amount of gas is noted in the soft tissues dorsal to the thoracic spine and cranial lumbar spine in part summating with the spinous processes (orange arrows). The spinous processes of the cranial lumbar spine are ill-defined; the spinous processes of the thoracic spine until T10 are intact; the remainder are not well seen due to the soft tissue injury. The vertebral bodies of the thoracic and lumbar spine are normal in alignment. The shoulder joints and the scapula are bilateral normal.

ABDOMEN:

The cranioventral and right cranial abdominal serosal detail is reduced due to a soft tissue to gas attenuating soft tissue thickening, which is displacing the abdominal organs moderately left laterally. There are air opacities that are suspected to highlight and track along the margins of the liver (blue arrowheads). The caudal abdominal serosal detail is normal; the cranial aspect of the urinary bladder is normal and well defined. The stomach is mildly large and contains heterogenous soft tissue attenuating material. Summating with the ventral aspect of the liver, multiple gas attenuating areas and a small amount of heterogenous soft tissue is noted.



Conclusions:

- Right caudal lung lobe haemorrhage with mild haemothorax, pneumothorax and acute traumatic fracture and malarticulation of the right 9th rib and fracture of the right 10th rib
- Extensive right thoracic and body wall injury with the 9th rib extending into the soft tissues.
- The reduced cranial abdominal serosal detail is likely in part due to a mild haemoabdomen and in part due to summation with the extensive abdominal wall injury. A right cranial abdominal wall perforating injury cannot be excluded.

Additional comments:

An abdominal ultrasound or contrast enhanced computed tomography examination to assess the extent of the thoracic wall injury can be helpful. Alternatively, wound exploration can also impart information. However if there is communication with the pleural space, it may be appropriate to have control of the large airways.