Abnormal Shoulder Films

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The shoulder is a site of pathology in both juvenile and adult dogs. As with all musculoskeletal lesions, pathology associated with the shoulder can be divided into aggressive (eg, neoplasia, osteomyelitis) or nonaggressive (eg, tendinopathy, degenerative joint disease) and developmental (eg, osteochondritis dissecans) or acquired. An anatomic location-based approach can help guide differential diagnoses.













MATCH THE IMAGES

The following lateral views of the shoulder exhibit common pathology. Match each radiograph with the corresponding condition.

CONDITION

- Degenerative joint disease (osteoarthritis; adult)
- ___ Primary bone tumor (adult)
- ___ Osteochondritis dissecans (juvenile)
- Supraspinatus tendon mineralization (adult)
- Biceps tendon mineralization (adult)
- ___ Cellulitis/osteomyelitis

ANSWER KEY

Osteochondritis dissecans (juvenile)

Note the lesion on the humeral head. A thin, mineralized flap (arrows) is associated with the concave defect.





Supraspinatus tendon mineralization (adult)

Note the mineralization of the supraspinatus tendon insertion (arrows). The cranial location of mineralization beyond the margin of the biceps tendon and the lack of a clavicular remnant on a caudocranial projection (not provided) may confirm the mineralization is within the supraspinatus tendon.





Primary bone tumor (adult)

Moth-eaten-to-permeative lysis (asterisks) can be seen in the proximal humerus. Formation of amorphous periosteal new bone (arrows) can be seen on the cranial aspect of the proximal humerus.





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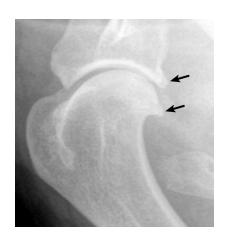
Biceps tendon
mineralization (adult)
Mineralization of the biceps
tendon (arrows) is superimposed on the intertubercular
groove. Enthesophytosis of
the supraglenoid tubercle
(dashed arrow) can be seen.





Degenerative joint disease (osteoarthritis; adult)
Mild periarticular new bone formation can be seen on the humeral head and caudal aspect of the glenoid cavity (arrows).





Cellulitis/osteomyelitis
The stippled gas pattern
superimposed on the proximal humerus creates the
impression of lysis. Large gas
pockets appear caudal to the
humerus (asterisks), and a
subtle periosteal reaction is
visible on the caudal aspect of
the proximal humerus.



