

# Case 4

Prepared by Drs. Ana Pinto and Chee Kin Lim

# Signalment and History

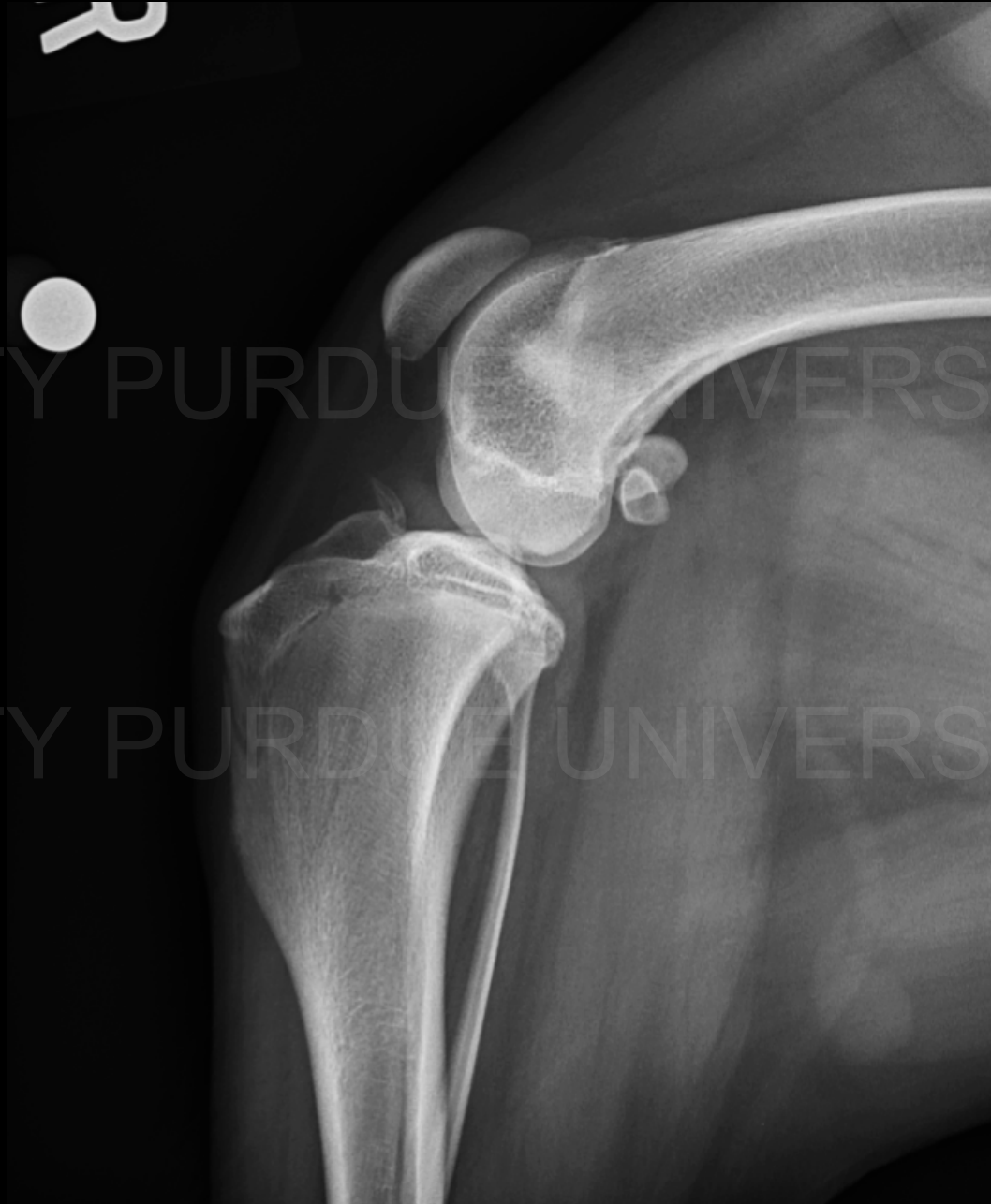
- 9 months old, intact male, Goldendoodle
- Preference for laying on left pelvis
- Difficulty getting up after lying on the left side
- Limping after long periods of rest

# Physical Exam Findings

- Orthopedic exam
  - Bilateral pelvic limb lameness (Rt worse Le)
  - Bilateral stifle joint swelling
  - Pain on right stifle extension
- Normal temperature, respiratory rate, pulse
- Unremarkable remaining physical examination

Right stifle and crus radiographs are available.

- 1) Describe your radiological findings
- 2) List your diagnosis/differential diagnosis





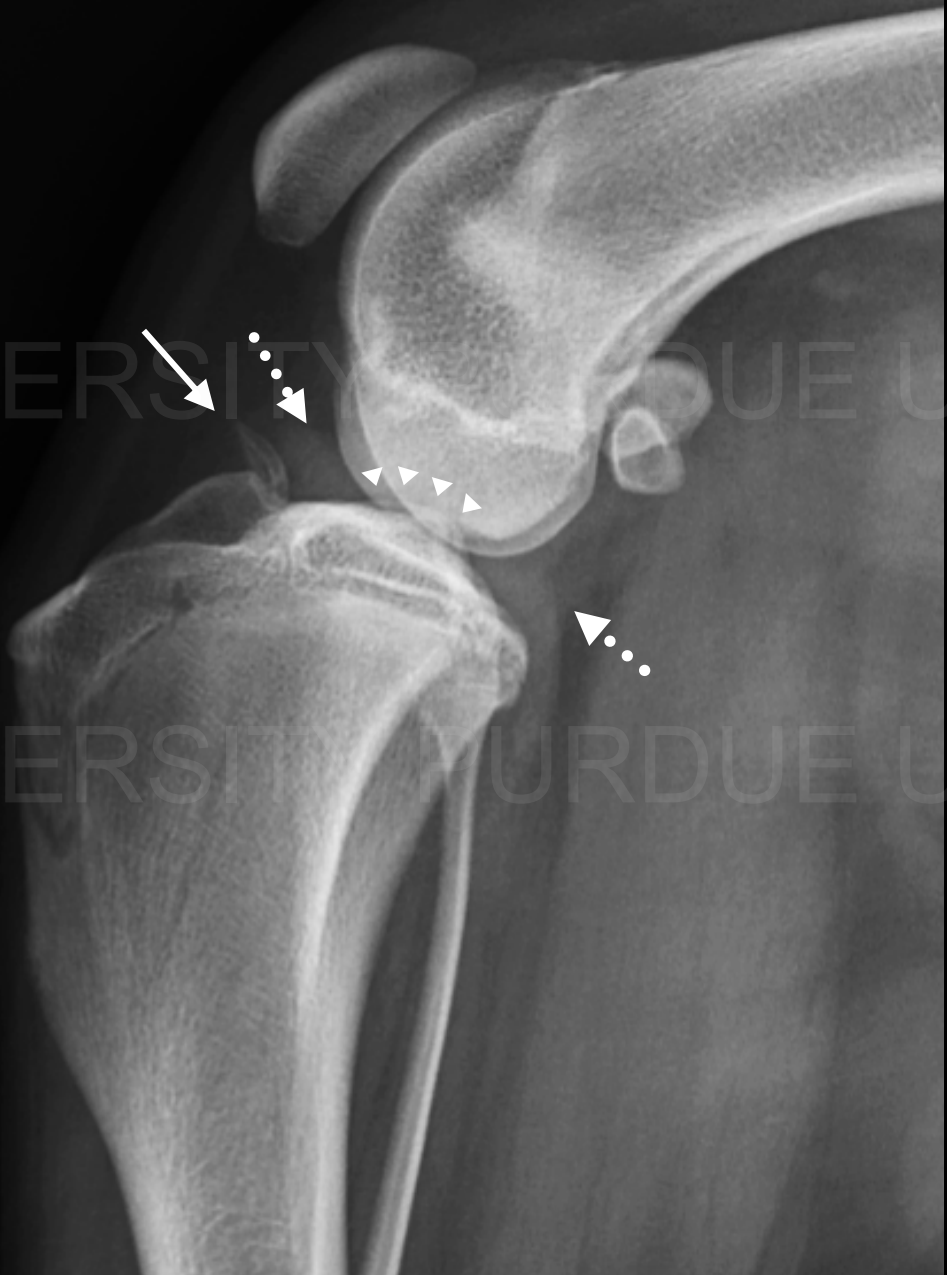
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# **Radiological Findings**

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Large irregularly marginated defect of articular margin of right lateral femoral condyle (arrowheads)

Ill-defined increased soft tissue opacity within the stifle joint with partial effacement of infrapatellar fat pad and caudal displacement of the caudal fascial plane (dotted arrows)



Large saucer shaped osteochondral fragment in cranial aspect of stifle joint (solid arrow)

Large irregularly marginated defect of the articular margin of the right lateral femoral condyle with surrounding sclerosis (arrowheads)



Large saucer shaped osteochondral fragment superimposed to the medial aspect of the femorotibial joint (arrow)

# Final Diagnosis

- Osteochondritis dissecans (OCD) of the right lateral femoral condyle
  - Subchondral bone concave defect of right lateral condyle with surrounding sclerosis and intraarticular osteochondral fragment
  - Increased synovial volume within the stifle joint
    - Effusion
    - Synovial thickening/synovitis

# Outcome

- Surgery was performed:
  - The OCD lesion was visualized on the lateral femoral condyle and was repaired using a synthetic cartilage plug for treating osteochondral defects



# Remarks

- Developmental disorder
- In young dogs affects medium and large breeds
- Males > Females
  - Failure of endochondral ossification
  - Thickening and weakening of cartilage
  - Necrosis of epiphyseal cartilage
  - Normal pressure or minor trauma to the joint leads to cracks and fissures of the abnormal cartilage
    - Cartilaginous or osteochondral flap leading to osteochondritis dissecans

# Remarks

- Unknown cause
  - Nutrition, rapid growth, trauma, hereditary components are suspected to be contributing factors
- Most common locations
  - Shoulder - caudal aspect of humeral head
  - Elbow – humeral trochlea
  - Tarsus - medial aspect of trochlear ridge of talus
  - Stifle - lateral femoral condyle > medial femoral condyle

# Remarks

- Can be bilateral or unilateral
- Prognosis is variable depends mainly on chronicity of the lesion and degree of degenerative joint disease
- Sequela
  - Osteoarthritis

# References

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