



Musculoskeletal

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Chief Complaint

- Duke ” is a 12 year old spayed female German Shepherd that developed acute right hind leg lameness after slipping on the ice while running after a ball.

Duke



History

- Sudden right hind leg lameness after slipping on the ice while running after a ball 3 days ago
- Initial lameness non-weight bearing
- On the 3rd day Duke is weight bearing but still clinically lame.

Physical Examination

- 1. 38.8 degrees C
- 2. Heart Rate 110 bpm
- 3. Obese – weight 60 kg
- 4. Clinically lame on right hind leg
- 5. No pain elicited while palpating the leg
- 6. Right stifle joint slightly swollen

Physical Examination

- List by number the abnormal signs in the Clinical Examination
- List by number which clinical sign is most important

Most important clinical sign

- Lame on the Right hind leg !

Rule Outs

- List all the Possible Diagnoses
- *This list is your Rule Out list*

Rule Outs

- 1. Hip Dysplasia
- 2. Anterior Cruciate Ligament rupture
- 3. Sprain or strain on ligaments
- 4. Neoplasia – Synovial Cell Sarcoma
- 5. Patella luxation

Which is the most likely cause?

- Select the number of the most likely cause.

The Plan

- What is your PLAN ?

What test would be most helpful

- 1. Blood Test: CBC and Serum Chemistry
- 2. Radiograph (Xray)
- 3. Ultrasound
- 4. Urine Test.

Select by number of the most helpful test.

Radiograph

- Radiograph would be the most helpful test.

Plan

- Radiograph: Lateral and Anterior/Posterior
 1. Coxofemoral View (Hip)
 2. Stifle View (Knee)
 3. Tarsal View (Hock)
- What joint do you want to radiograph?

Which Joint do you want to radiograph

- The entire hind leg ...including all three joints including the toes.
- Hip Joint (Coxofemeral)
- Knee Joint. (Stifle)
- Hock Joint (Tarsal)

Hind leg



Which Joint is most likely to cause the lameness

- 1. Hip Joint (Coxofemoral)
- 2. Knee Joint (Stifle)
- 3. Hock joint (Tarsal)

Which Joint is most likely to cause lameness

-
- The Hip Joint and the Knee Joint.

Coxofemoral Joint Normal



Hip Dysplasia



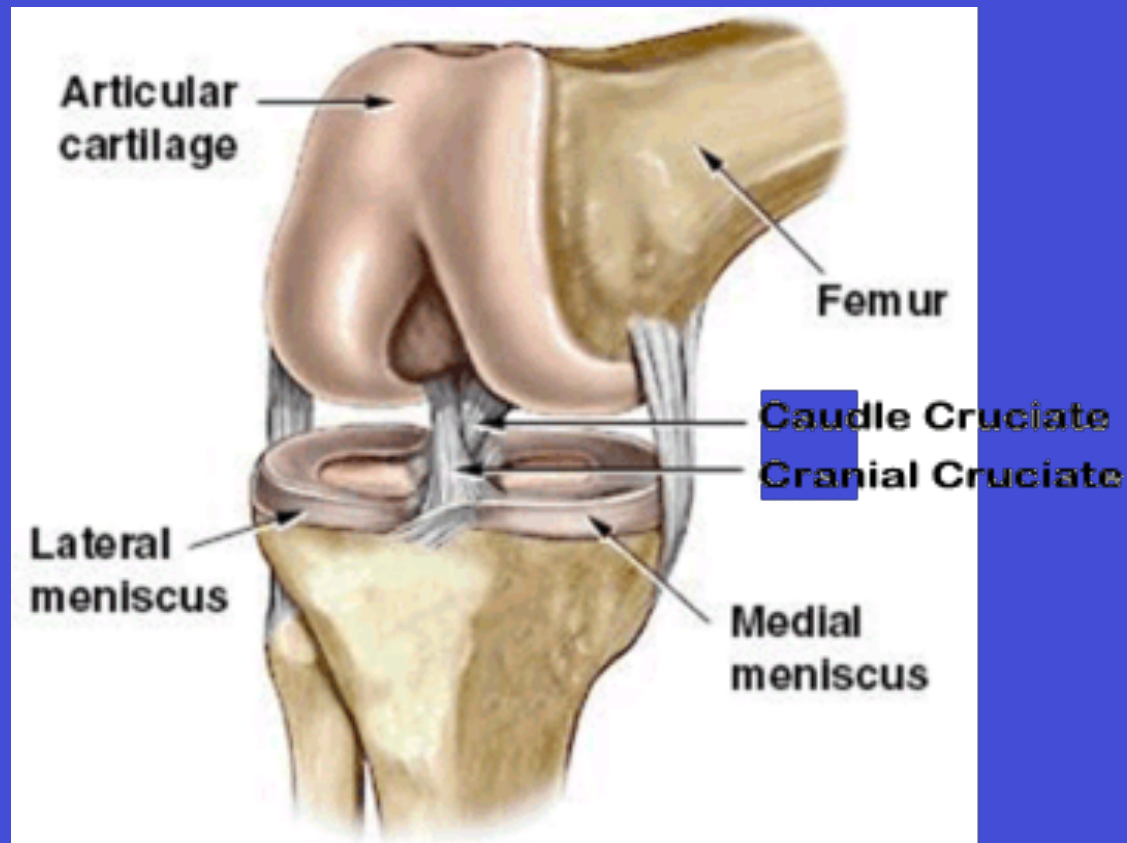
Diagnosis

- 1. Normal
- 2. Abnormal – Hip Arthritis (Hip Dysplasia)

Stifle Joint



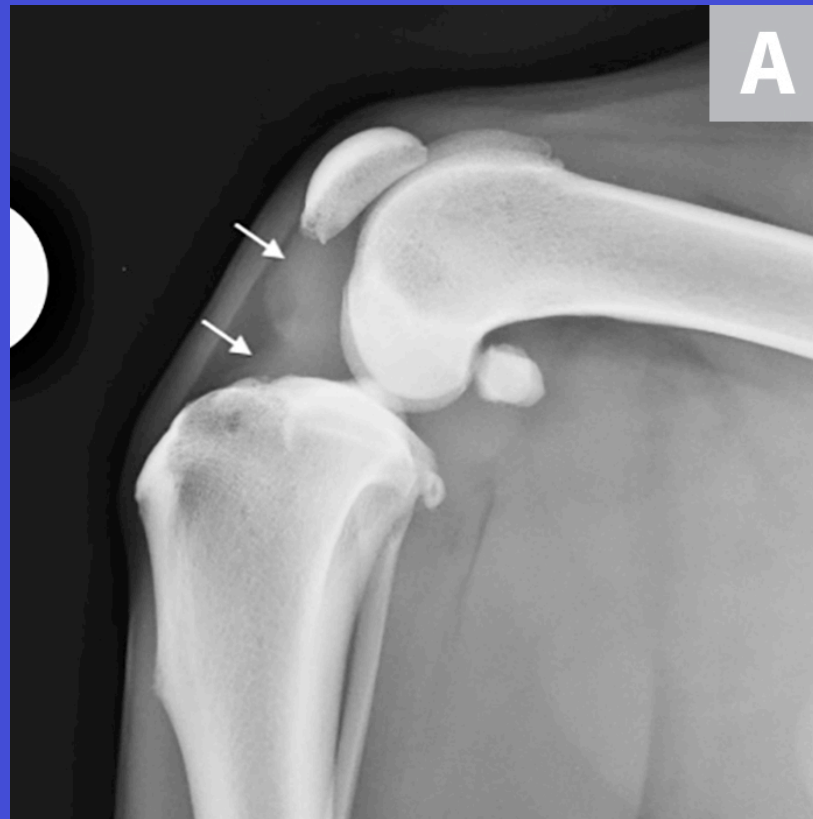
Normal Stifle Joint



Normal Stifle Joint



Normal or Abnormal Stifle Joint



What do you think?

- 1. Normal Knee Joint (Stifle)
- 2. Abnormal Knee joint

Radiographic Lesions

- Abnormal Joint
- Soft tissue swelling – stifle joint

What further tests do you need to do?

- What further tests would you do to confirm your diagnosis?
- Cranial Drawer Test
- Tibial Thrust Test

Normal Anterior Cruciate



Ruptured Anterior Cruciate



Stifle



Anterior Drawer Sign Test



Anterior Drawer Sign



Position for the Anterior Drawer Sign



Anterior Drawer Sign



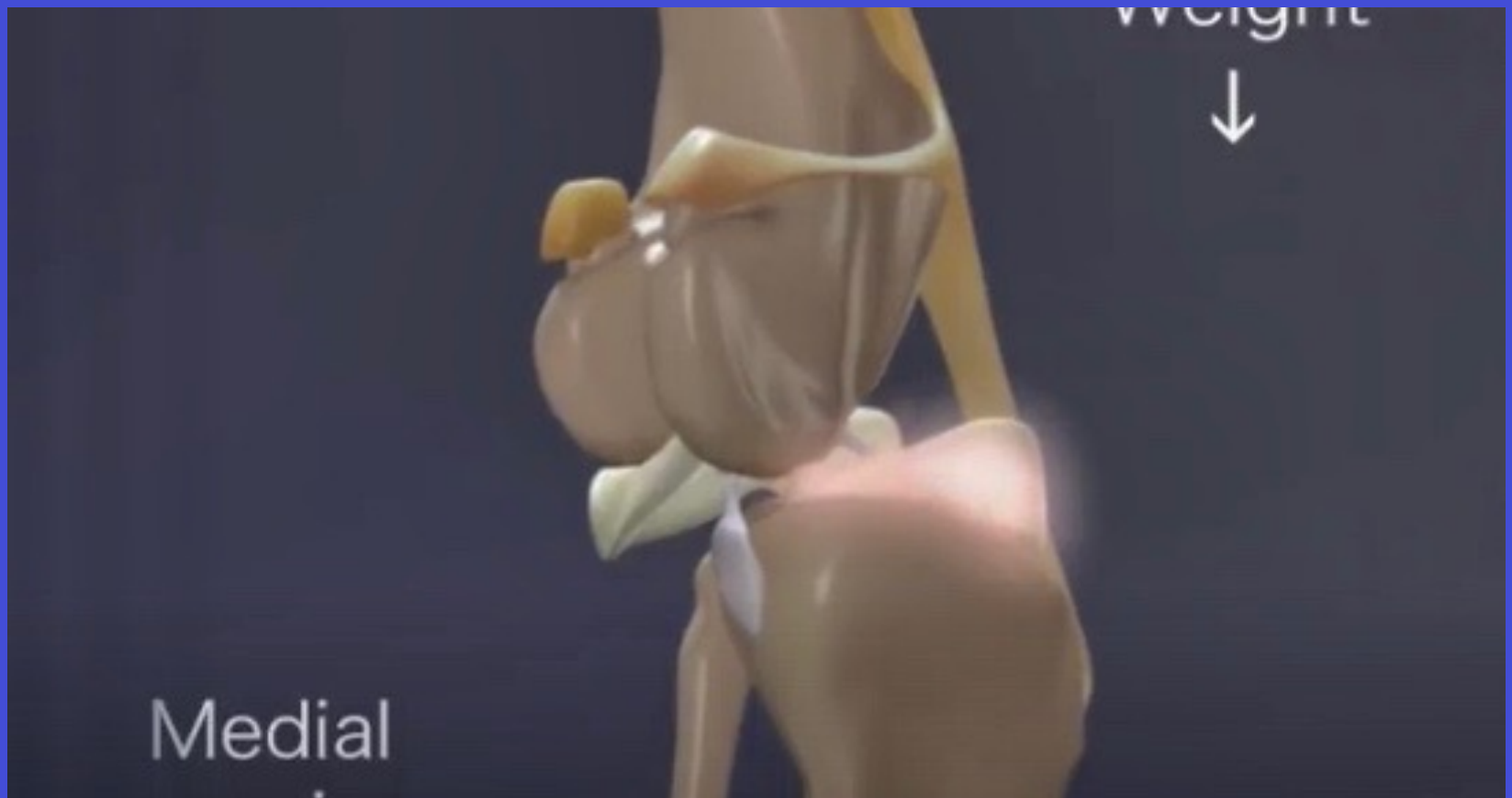
Tibial Thrust Sign



Tibial Thrust Sign



Torn Medial Meniscus



Rule Outs

- After evaluating the clinical signs and radiographs and diagnostic tests which rule out are likely and which are unlikely. Give reasons for your answer.

Rule Outs

- Hip Dysplasia –unlikely negative on radiographs
- Ant. Cruciate Ligament Rupture – likely positive anterior drawer signs
- Neoplasia –unlikely- negative on radiograph.
- Patella Luxation – unlikely – no evidence of luxation of the patella found on examination

Final Diagnosis

- What is your final diagnosis?

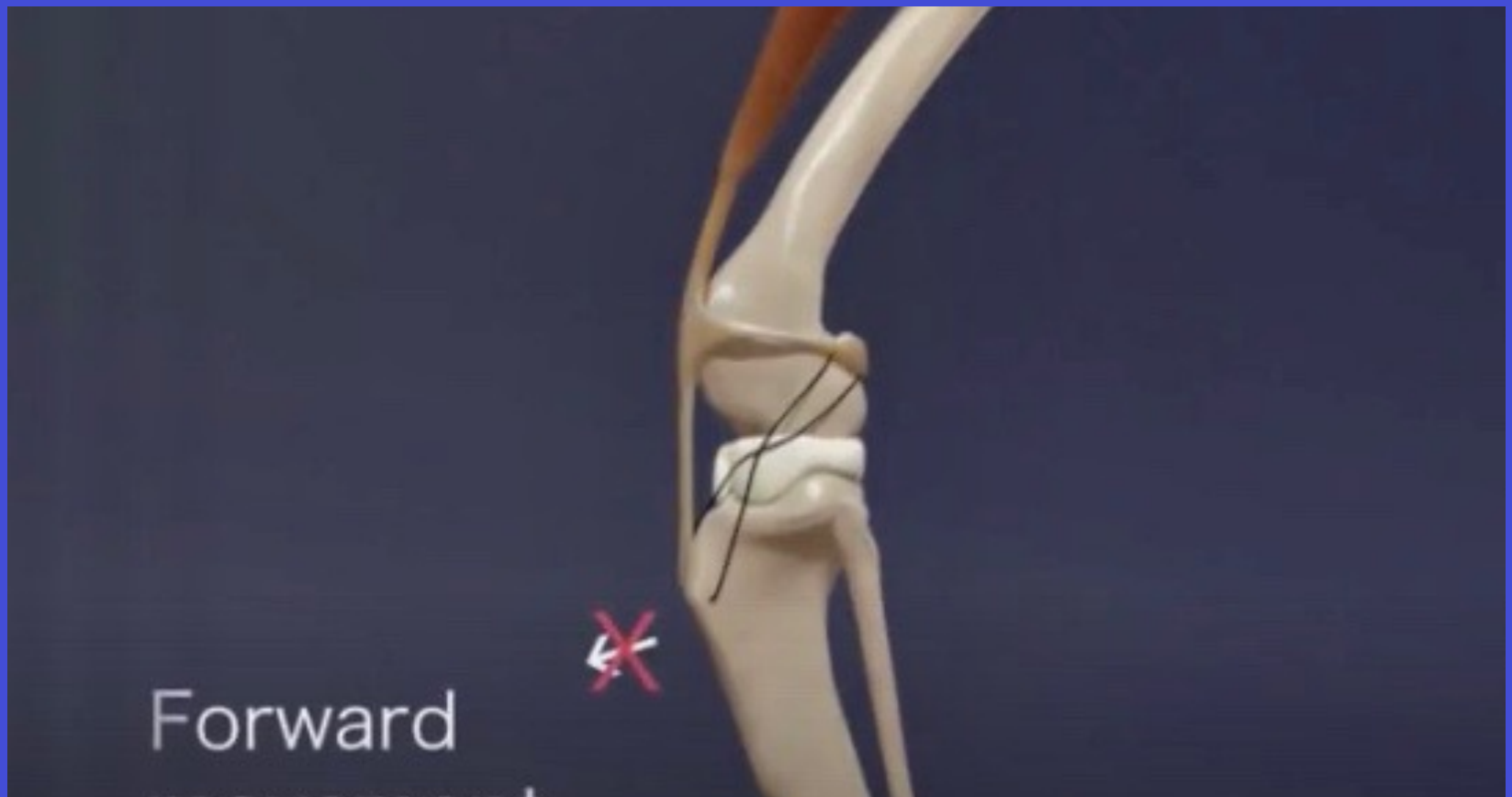
Final Diagnosis

- Ruptured Anterior Cruciate Ligament
- With possible Meniscal tears?

Treatment Plan

- Surgical Correction

Stabilization Technique





The End