



The Universal Hip Workshop

Evaluation of Dogs for Total Hip Replacement

Jonathan Dyce

MA, VetMB, MRCVS, DSAO, DACVS



COLLEGE OF
VETERINARY MEDICINE



Notes

Evaluation of Dogs for Total Hip Replacement

25% dogs referred to OSU-VMC for THR
will proceed to surgery



Notes



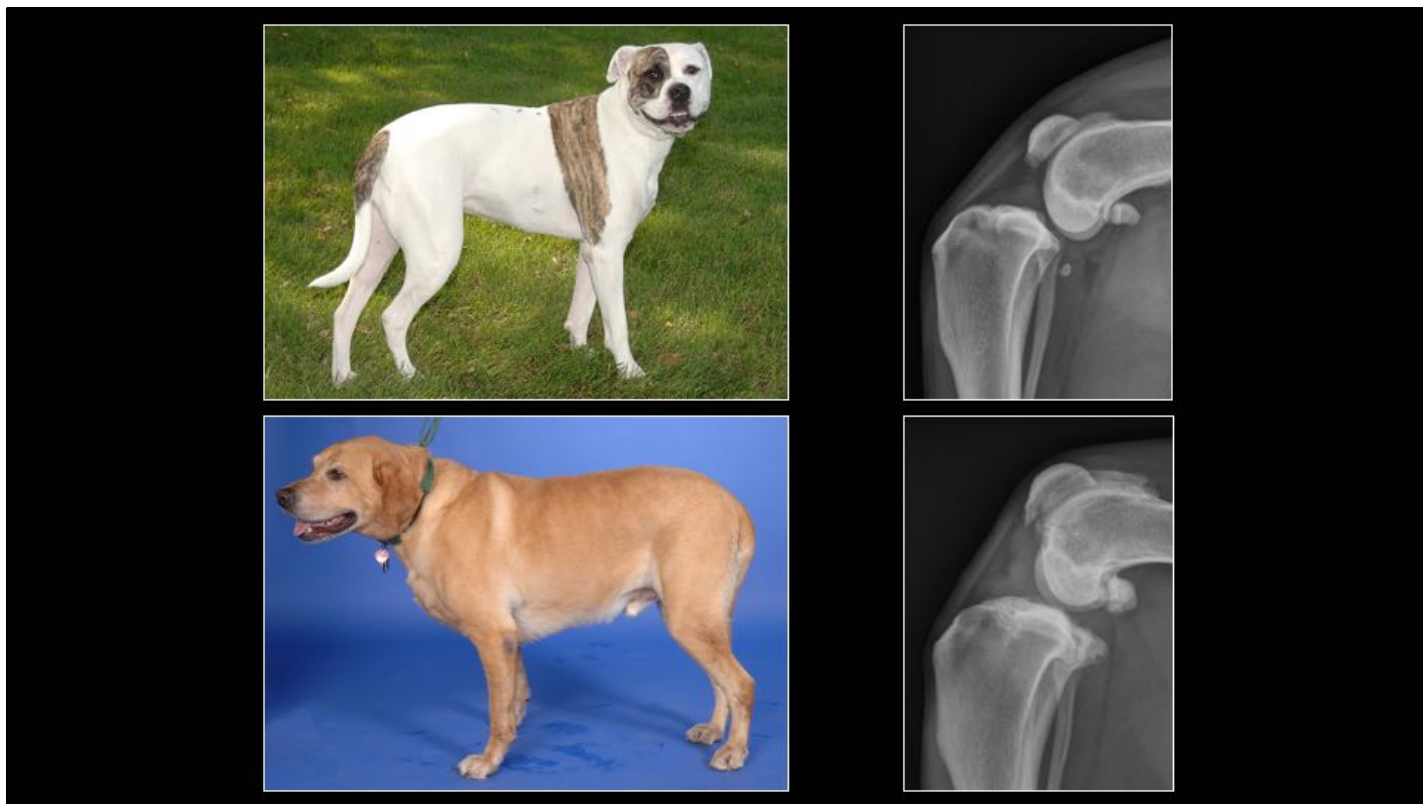
Evaluation of Dogs for Total Hip Replacement

Contraindications to THR

- Other orthopedic disease
 - CCL rupture
- Neurological disease
- Bacterial pyoderma
- Medical management
 - Effective
 - Incomplete
- Other



Notes



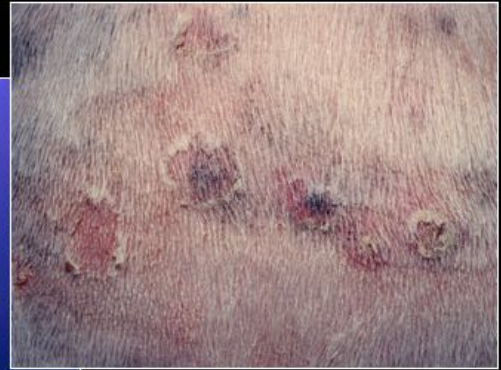
Notes

Patellar luxation may either improve or worsen patellar luxation



Evaluation of Dogs for Total Hip Replacement

Bacterial Pyoderma



Notes

Evaluation of Dogs for Total Hip Replacement

Medical management

- Effective
- Incomplete



Notes



Evaluation of Dogs for Total Hip Replacement

Ideal candidate

- sole significant problem is HD / OA



Notes



Evaluation of Dogs for Total Hip Replacement

Caseload

- 375 THRs
- Jan 2003 – Aug 2010
- Single surgeon
- Performed at
OSU-VMC
- 54 (14%) second side

Diagnosis

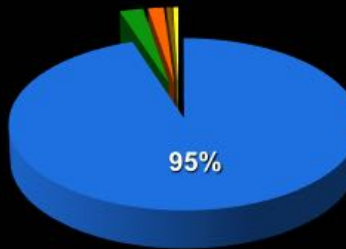
■ HD/OA

■ FCP Fx

■ Luxation

■ Femoral
neck Fx

■ Acetabular
Fx

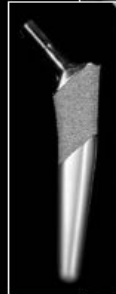


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Evaluation of Dogs for Total Hip Replacement

Options



BFX cup BFX stem
155

2yo golden retriever

CFx cup CFx stem
112

10yo Labrador retriever

Notes

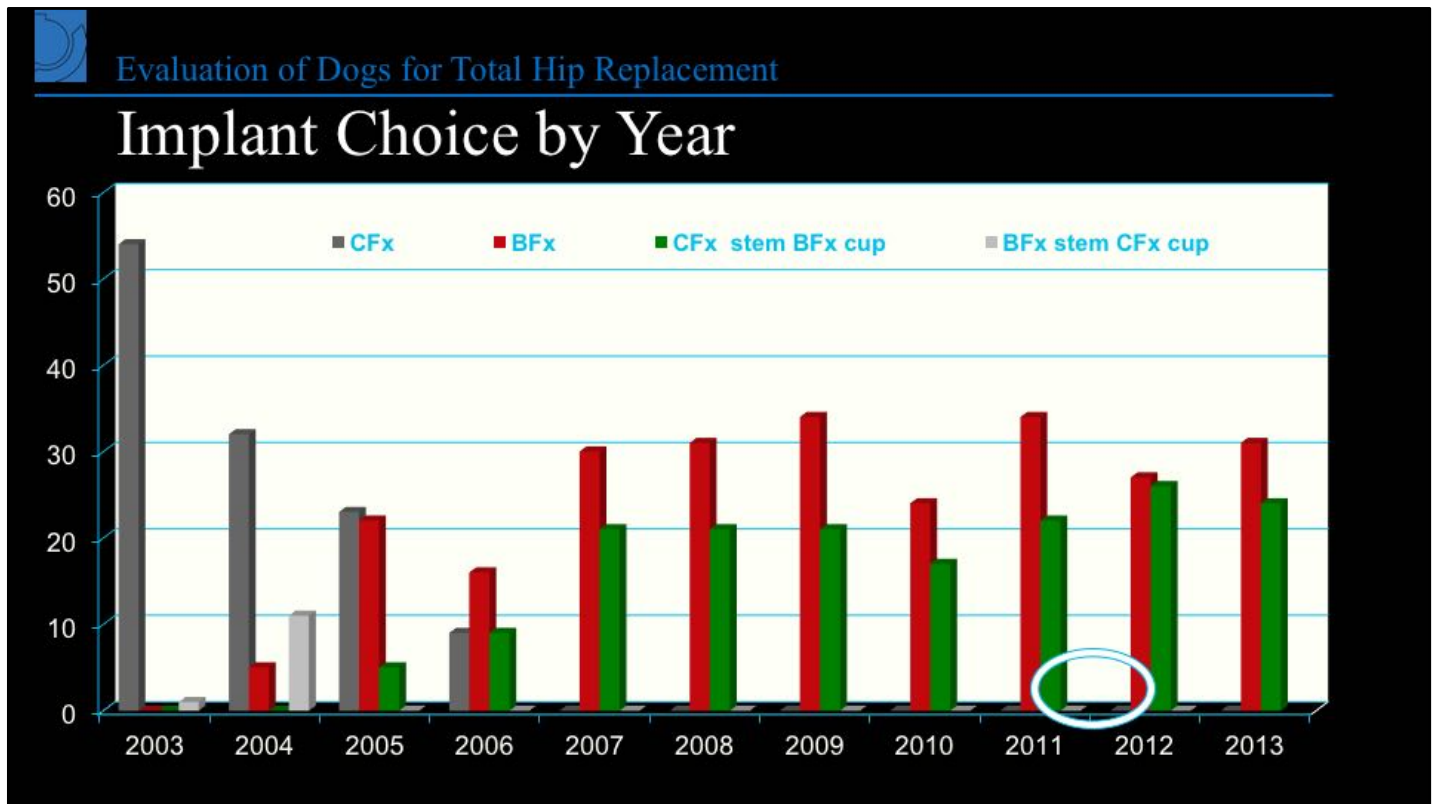


Evaluation of Dogs for Total Hip Replacement

Options



Notes



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Evaluation of Dogs for Total Hip Replacement

Jack 1yo golden retriever



Notes



Evaluation of Dogs for Total Hip Replacement

Jack 2yo golden retriever



Notes



Evaluation of Dogs for Total Hip Replacement

Griffey

6mo M pit bull terrier 15kg



Notes



Evaluation of Dogs for Total Hip Replacement

Collared Titanium EBM stem



Notes

Evaluation of Dogs for Total Hip Replacement

Juvenile THR

- Cementless (BFx) THR
- Luxoid hip



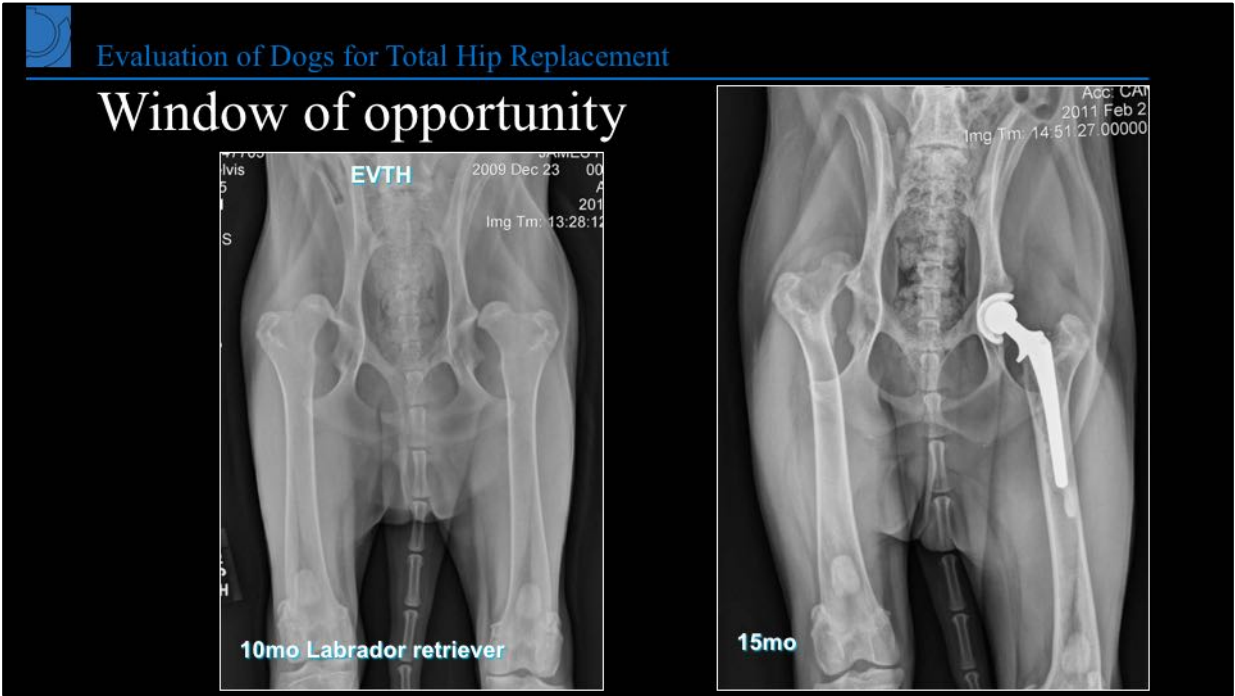
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Evaluation of Dogs for Total Hip Replacement

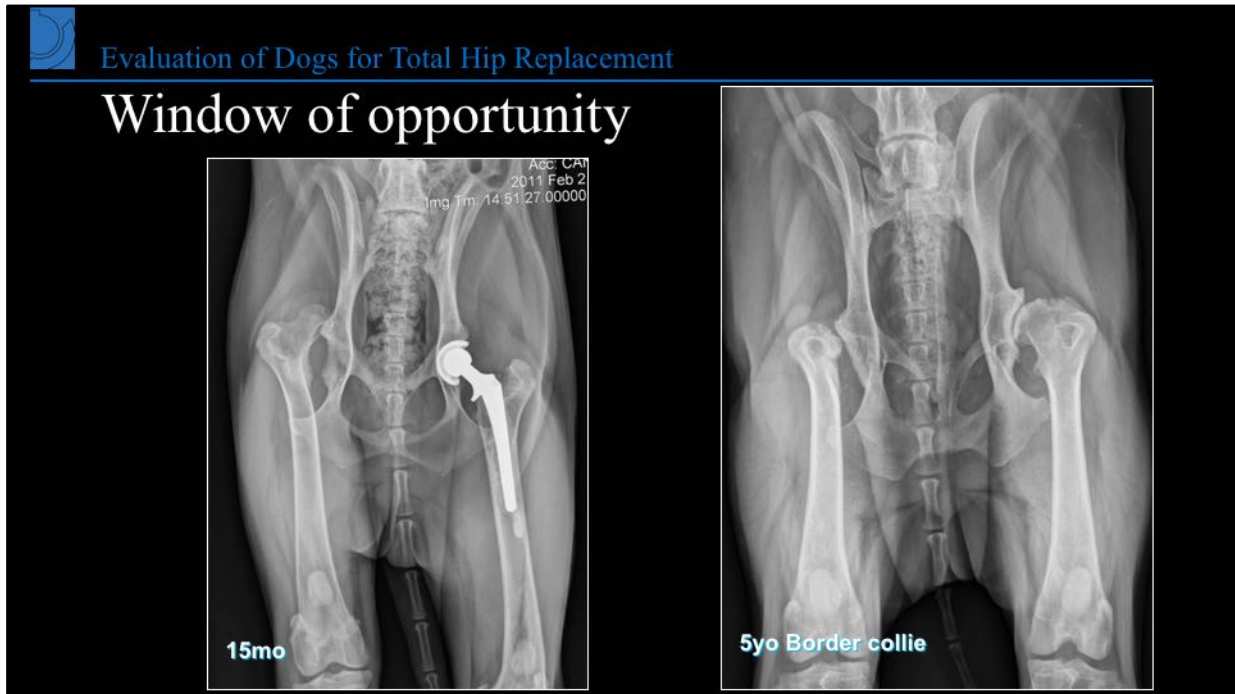
Mona
1yo St Bernard



Notes



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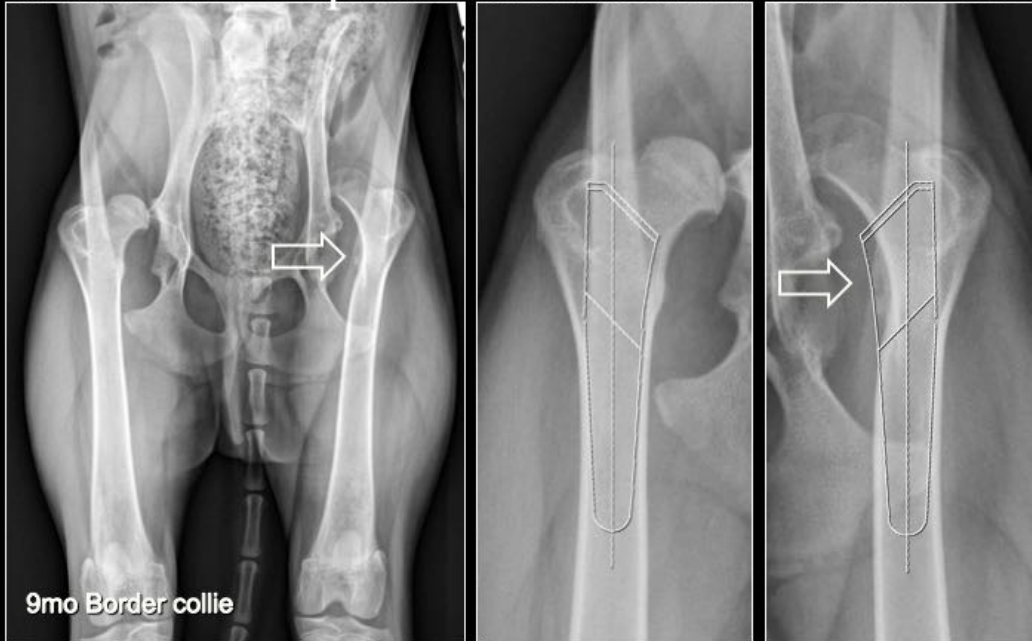
Text

Notes



Evaluation of Dogs for Total Hip Replacement

Lateralization of proximal medial femoral cortex



Notes

Evaluation of Dogs for Total Hip Replacement

Preserve cancellous envelope



Notes



Evaluation of Dogs for Total Hip Replacement

Treu
11yo GSD



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Evaluation of Dogs for Total Hip Replacement

Femoral neck fracture



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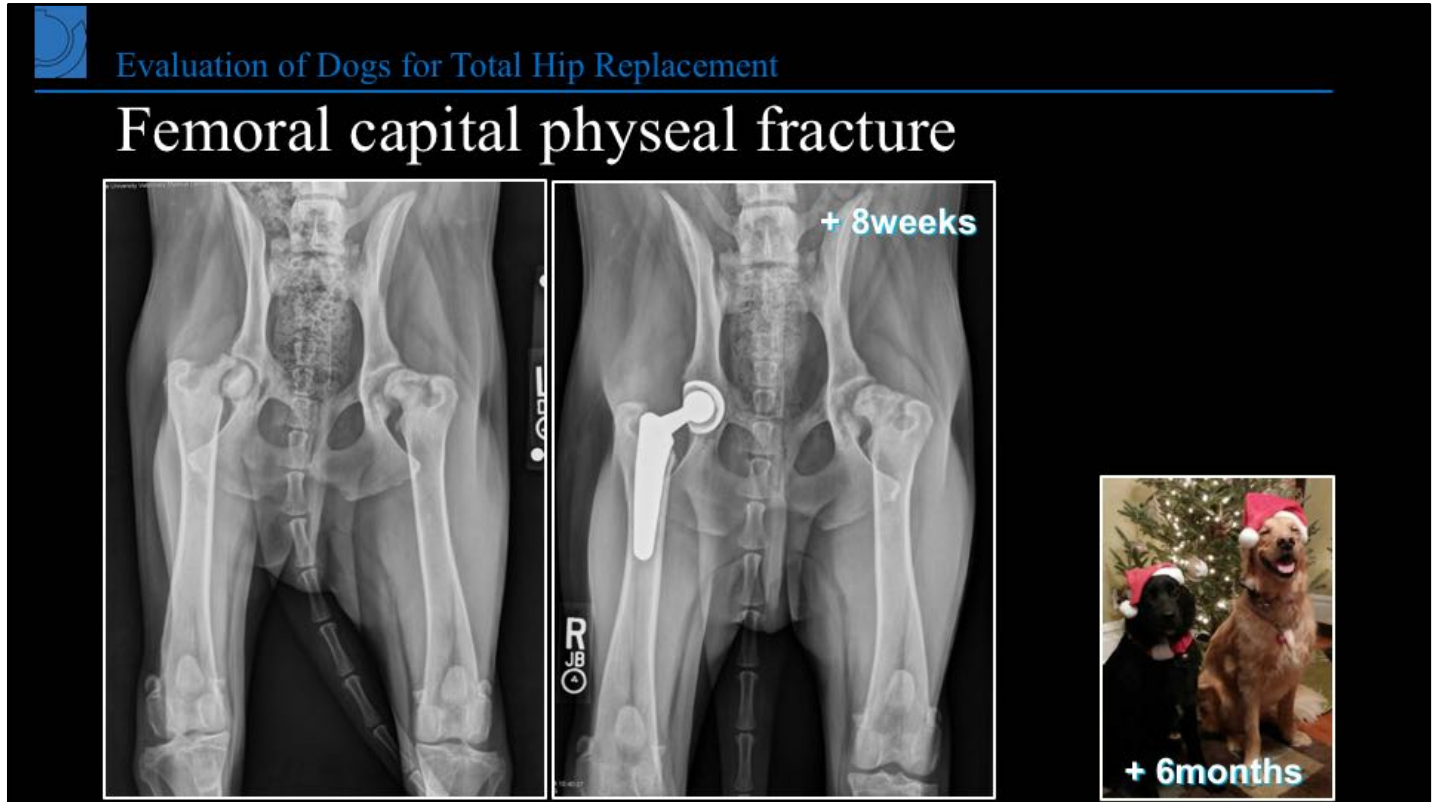


Evaluation of Dogs for Total Hip Replacement

Femoral neck malunion fracture



Notes



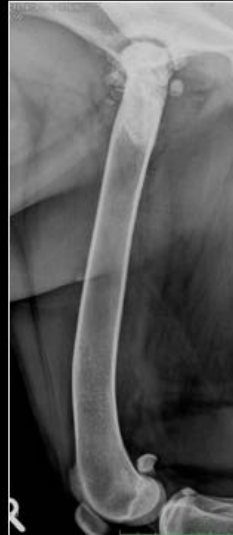
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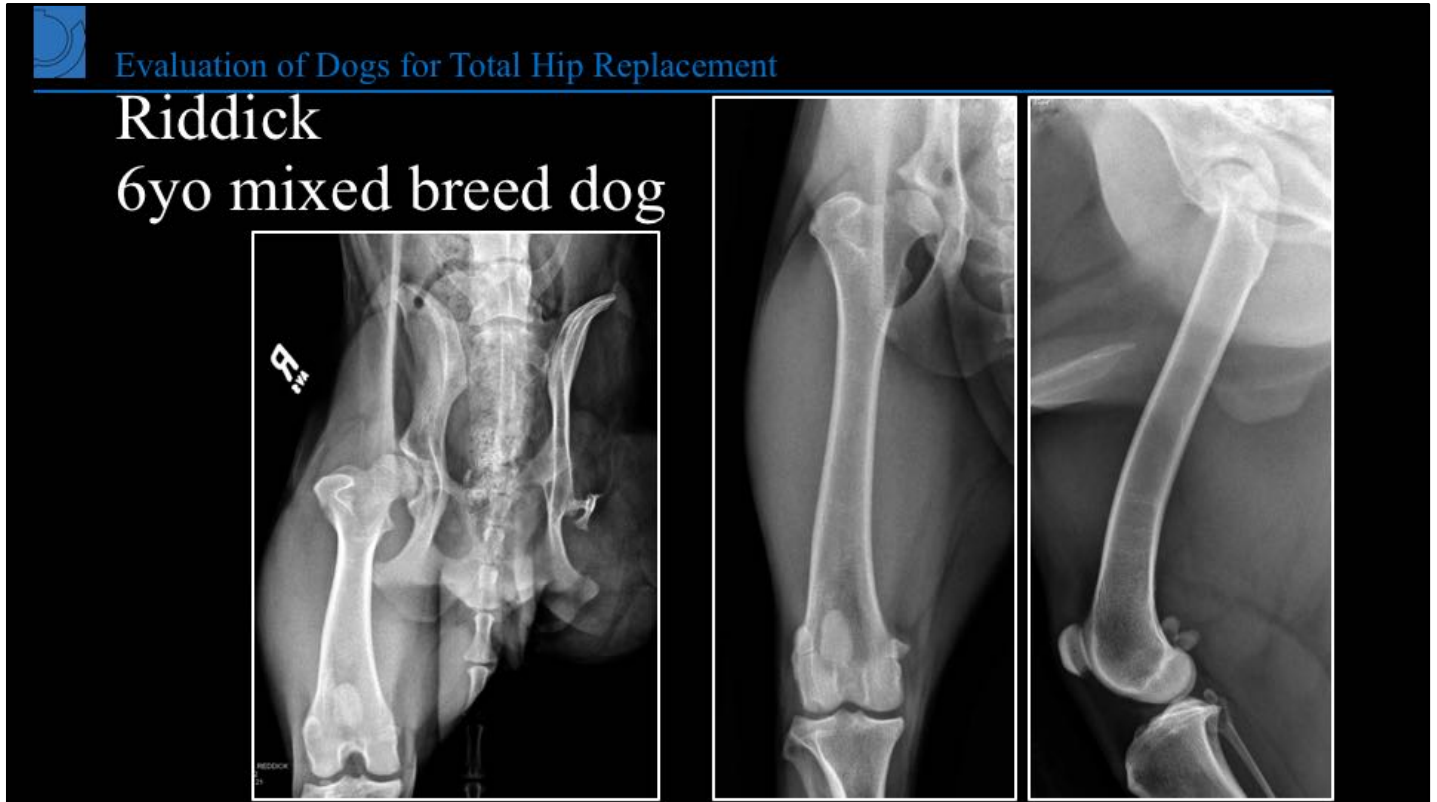
Evaluation of Dogs for Total Hip Replacement

Femoral capital physeal fracture

- spontaneous, chronic



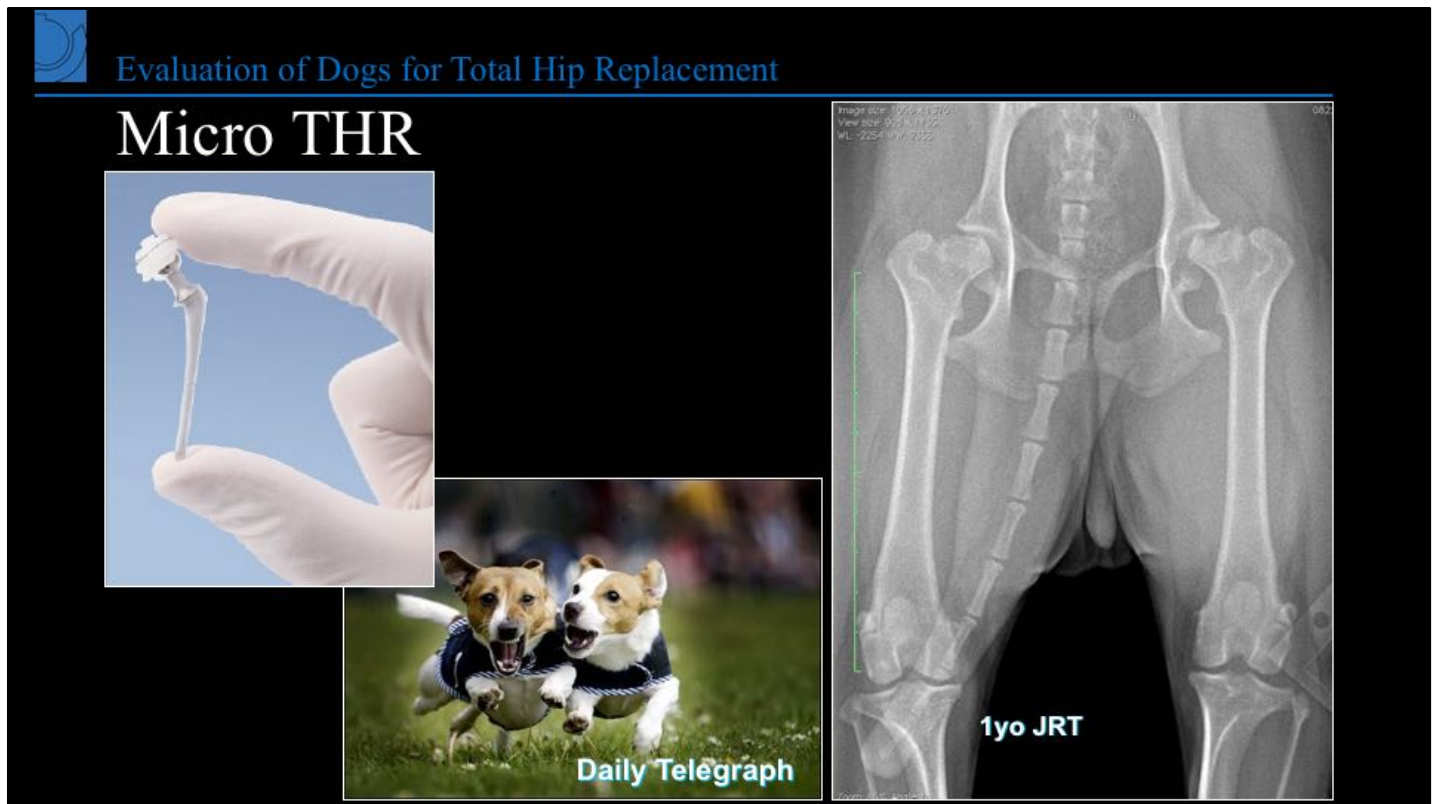
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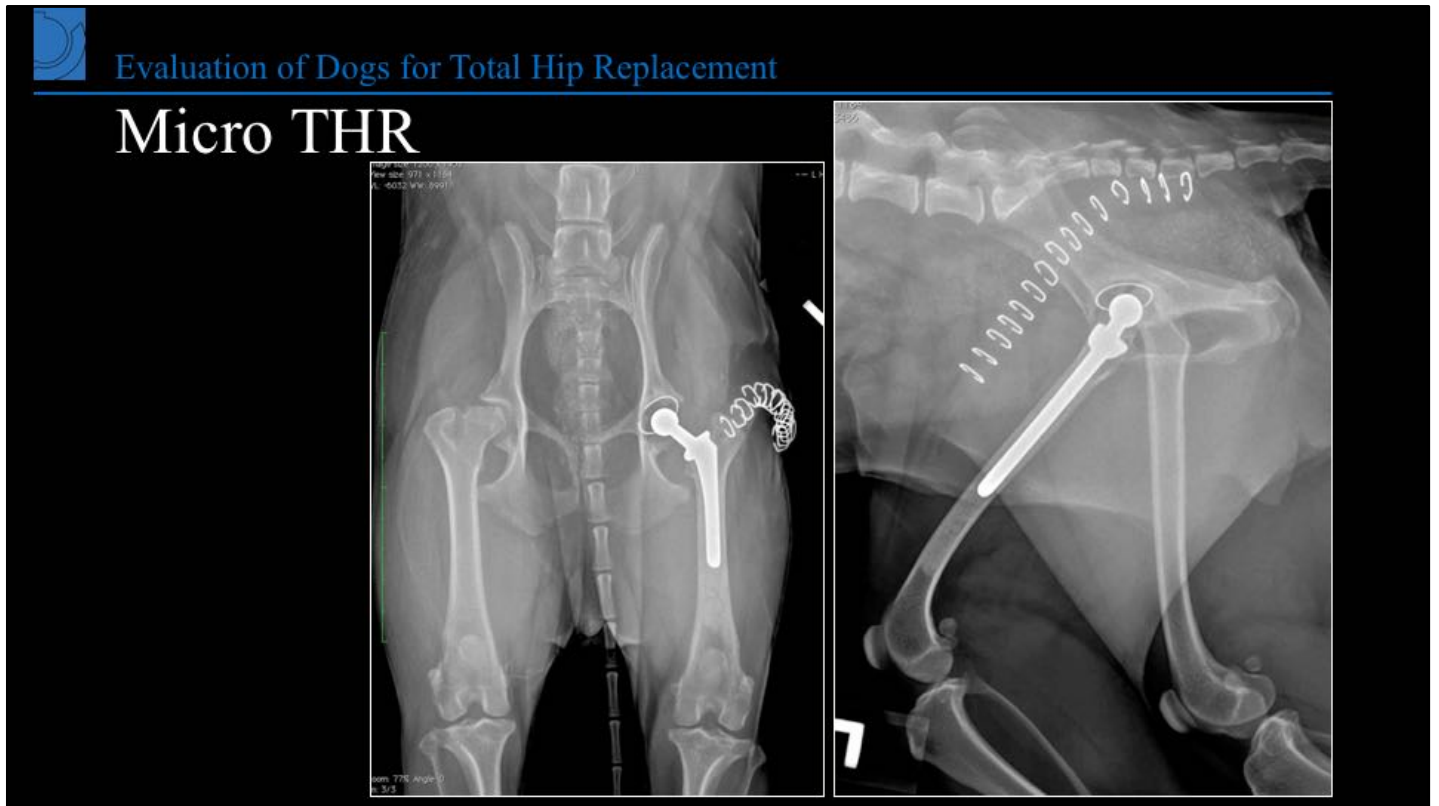
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Evaluation of Dogs for Total Hip Replacement

Tanner

9yo Griffon Bruxellois mix 8kg



Notes



Evaluation of Dogs for Total Hip Replacement

Micro THR

Tanner +10 days



Notes



Evaluation of Dogs for Total Hip Replacement

Micro THR for cats



Notes



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Evaluation of Dogs for Total Hip Replacement

3-D CT reconstruction



Notes



Evaluation of Dogs for Total Hip Replacement

Mocha 6yo FS Labrador retriever

- Evaluate for THR candidacy.



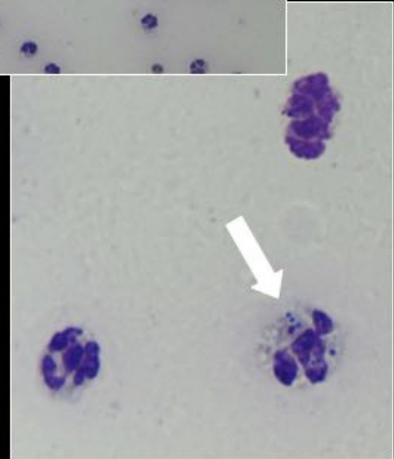
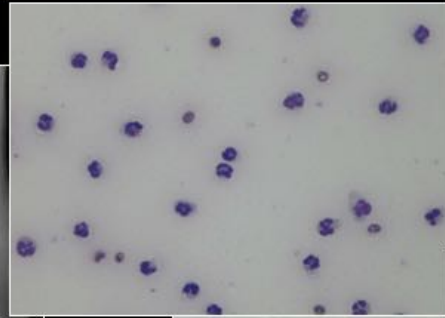
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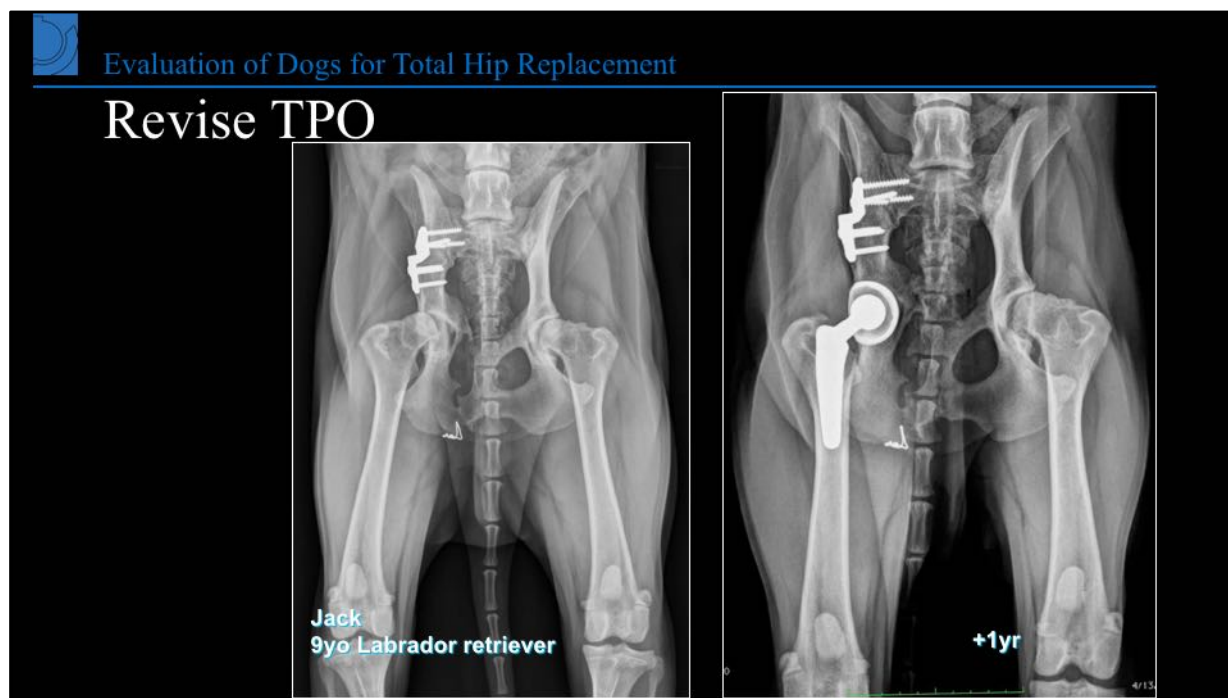
Evaluation of Dogs for Total Hip Replacement

Infective arthritis

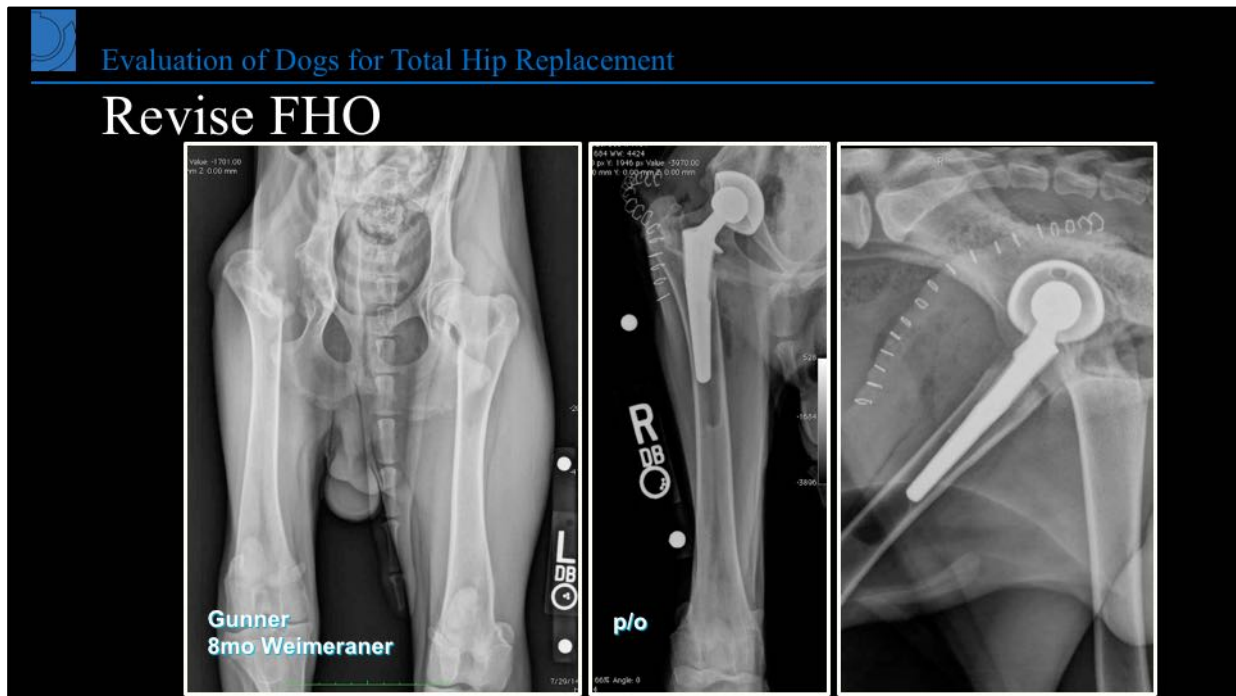
- iatrogenic



Notes



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Evaluation of Dogs for Total Hip Replacement

Total hip score

A Pozzi, J Peck, M Kowaleski, J Dyce

- acetabular exposure
- femoral presentation
- acetabular preparation
- femoral preparation
- reduction
- closure



Hip scoring may be helpful to predict complications

Notes

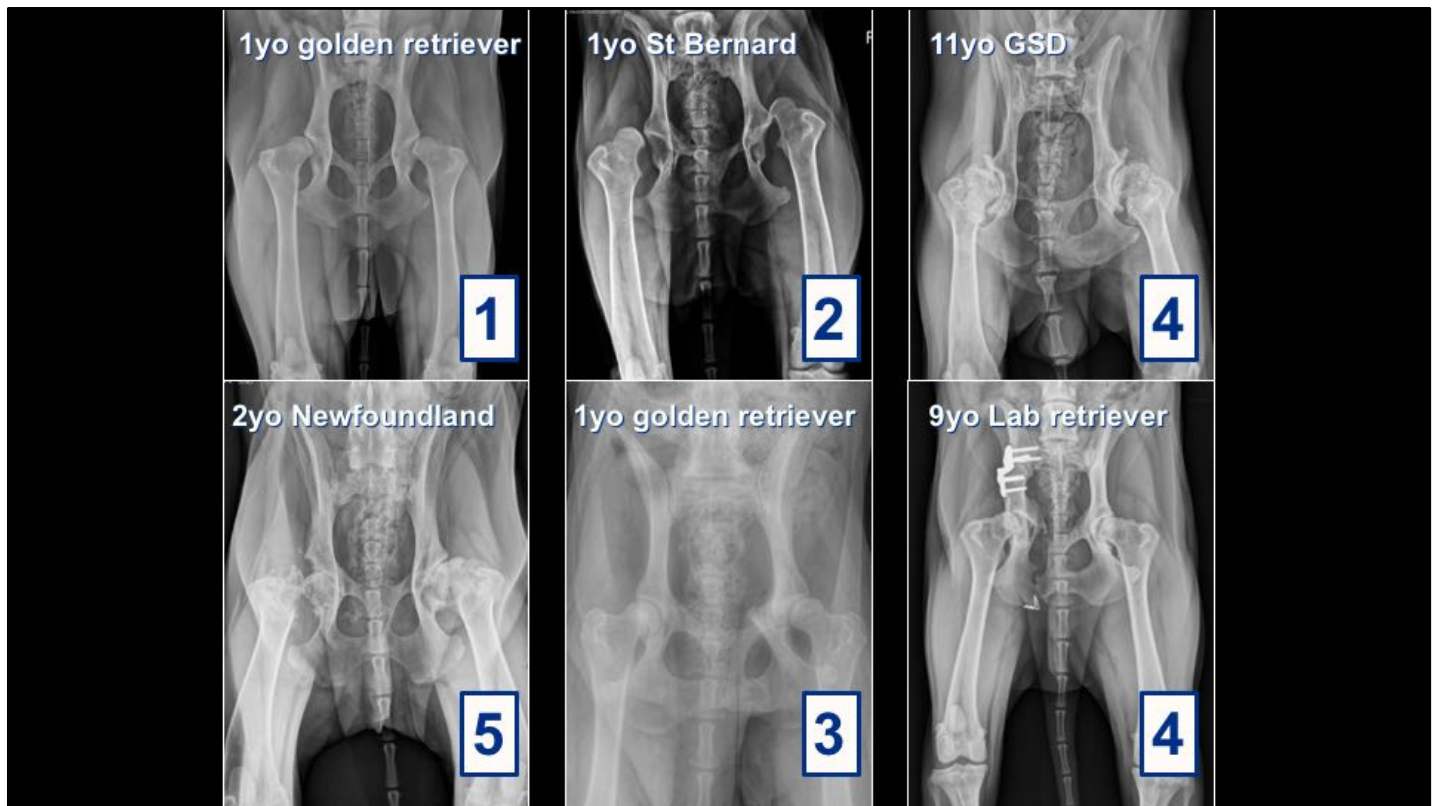


Evaluation of Dogs for Total Hip Replacement

Total hip score

- acetabular preparation
 - Immature dog with disarticulated hip (poor bone quality: medial cortical perforation risk)
 - Acetabular sclerosis (severe OA: implications for interdigitation of cemented fixation and ease of incremental preparation).
 - Dorsal migration of the acetabular articular surface and acetabular bony infilling (definition of reaming axis)
 - Pseudoacetabulum (associated with chronic luxation)
 - Dorsal rim erosion
 - Size of acetabulum (e.g. small dog where 22mm BFX cup prep is desirable but mandates cranial translation of reamed axis).
 - Poor acetabular trabecular bone quality (young GSD) (compromised press fit)
 - Acetabular malunion.
 - Previous JPS / TPO / transitional asymmetrical vertebral attachment
 - Revision arthroplasty (CFx / BFX)

Notes



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Evaluation of Dogs for Total Hip Replacement

THR Revision



**4yo German
shepherd**



2yo Newfoundland



3yo Great Pyrenees

Notes



Evaluation of Dogs for Total Hip Replacement

Thank you for your attention.
Questions?



Notes
