

Use of MRI in Cruciate Disease

Andrew Robinson



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Lameness Protocol

- Signalment
- History
- Movement
- Clinical examination
- Manipulation under GA
- Radiography – orthogonal views of stifles and pelvis
- MRI scanning

Initial results from September 2002 to December 2007

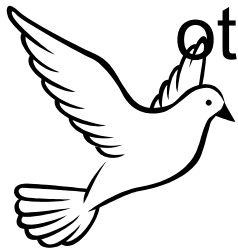
205 cases of stifle lameness went
on to MRI investigation



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Breed distribution

crossbreds		22
Golden retriever		19
Labrador		19
Boxer	17	
Staffordshire BT		14
Rottweiler		11
Mastiff breeds	11	
others	92	



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Sex distribution

Male entire	57		
Male neuter	55		55%
Female entire	24		
Female neuter	69		45%



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MRI protocol

- STIR dorsal
- SE transverse
- SE sagittal
- TSE sagittal



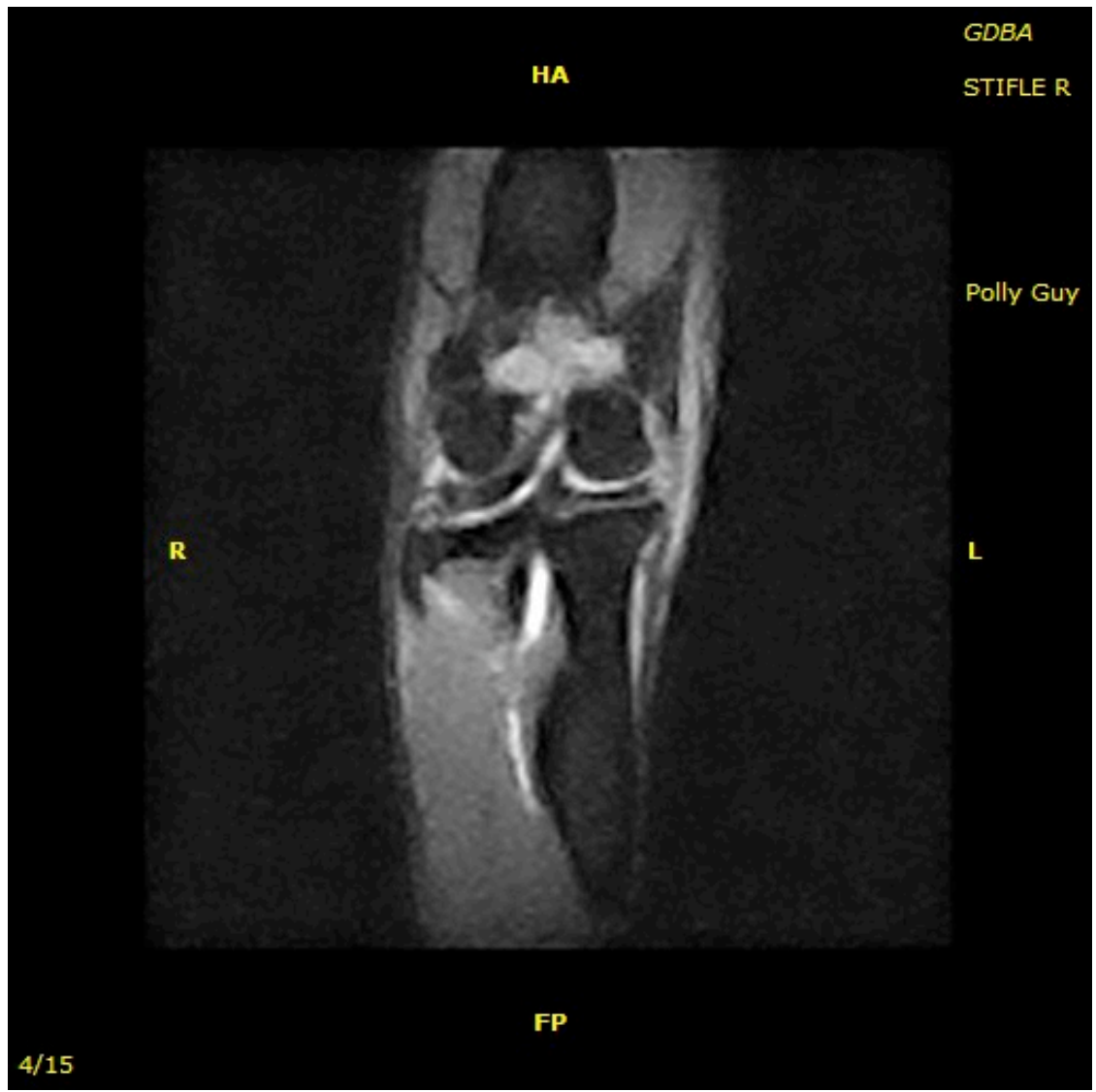
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MRI data 2003-2007

stifle scans performed	246	
41 bilateral		
164 unilateral		
stifles with CrCL damage		206
26 bilateral		
154 unilateral		
stifles showing meniscal damage	42	
re-scans due to complications	5	
other diagnoses (includes 5 tumours)		20



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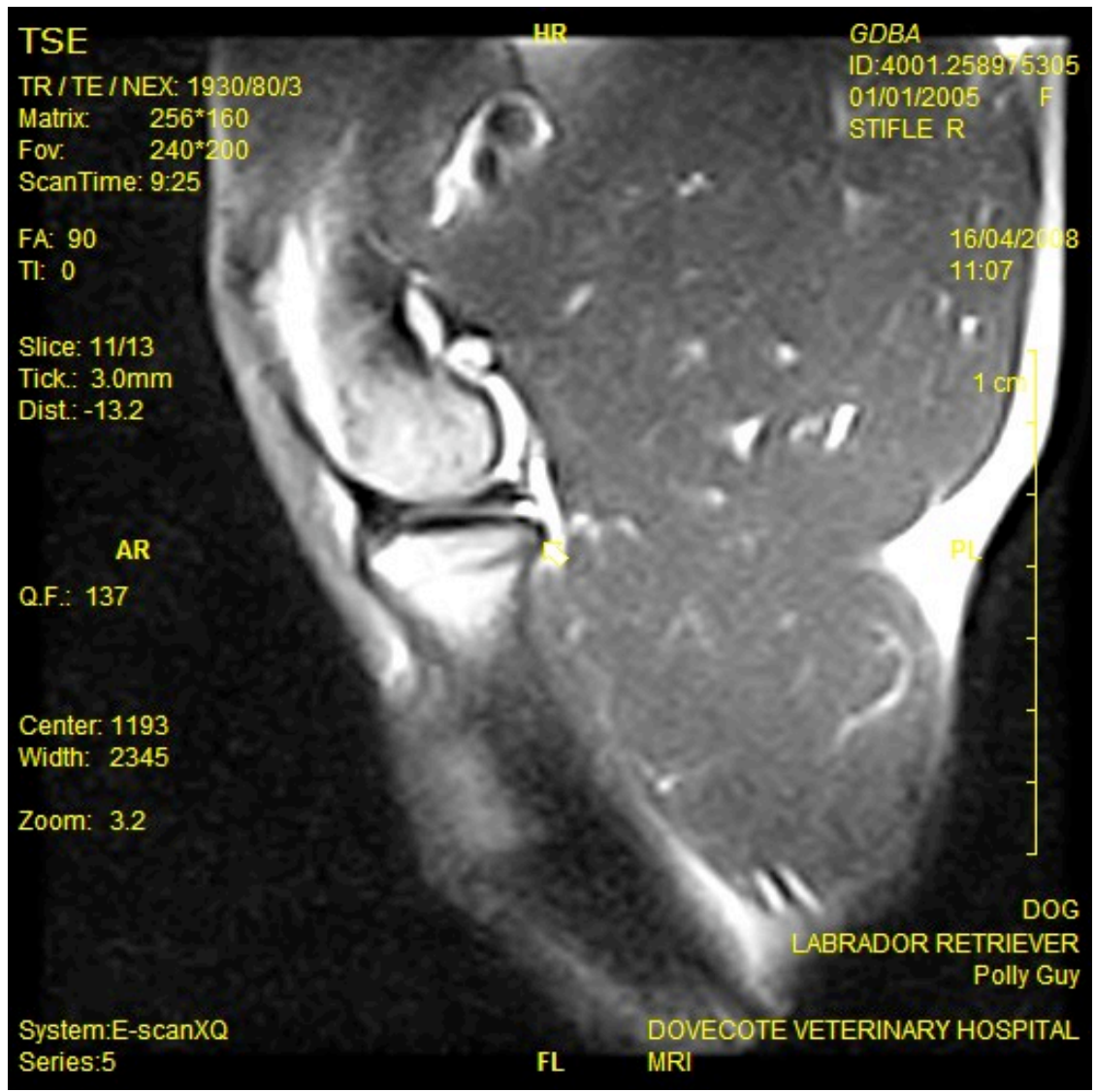
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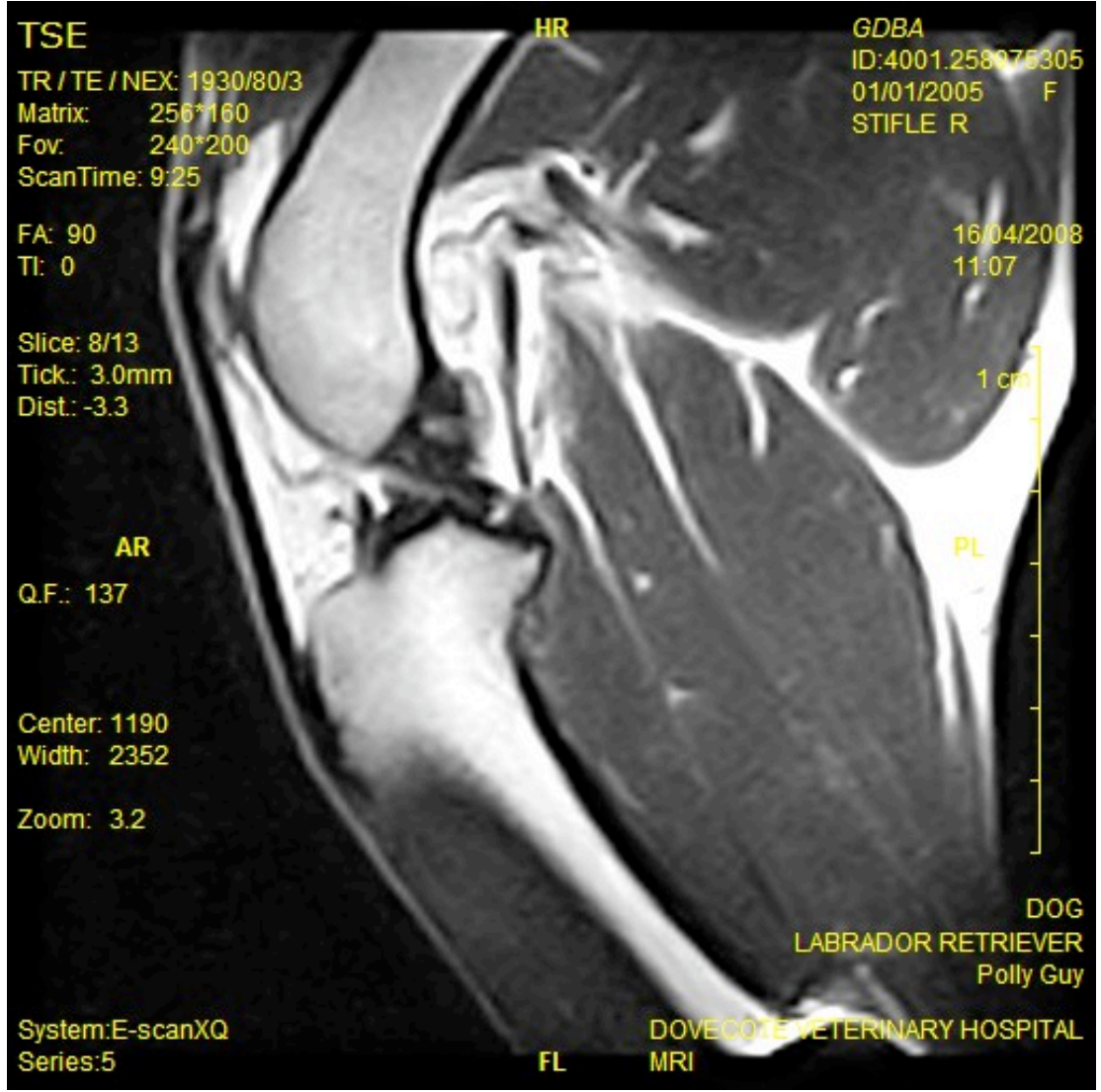
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Surgical Protocol

Minimal Intervention

- No arthrotomy unless meniscus badly torn or other lesions shown on imaging

- No meniscal release

TTA primary correction

Lateral fabella-tibial suture

Cranial closing wedge



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Surgical data

Cranial closing wedge	62
Tibial tuberosity advancement	116
Lateral fabella-tibial suture	8
Others	20

-of the 178 CCW/TTA operations 25 (14%)
had arthrotomies to remove torn menisci



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Post Operative Protocol

- Restricted leash walks
- Small room rest on non slip floor
- NSAIDS as required
- Regular checks at referring practice
- Examination at 2-3 weeks post op
- Examination and x-ray at 6-8 weeks
- Physiotherapy and hydrotherapy as required



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Complications

	CCW	TTA
Seroma	6	2
Screw replacement	1	
Suture reaction	1	
Fibula fracture	4	
Infection	3	1
Tibial crest fracture		1
Implant fracture		1
Secondary meniscal damage	1	4
Total complications		16/62 (26%)
	9/116(8%)	



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Discussion

What proportion of menisci continue to deteriorate with time

Does minimal surgical intervention allow an improved recovery and better long term results



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Acknowledgements

Alison Robinson
Antonella Fabrissin



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