

VCOT-08-10-0103: Diagnostic value of ultrasonography to assess stifle lesions in dogs after cranial cruciate ligament rupture: 13 cases

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Supplementary Table 1: Ultrasonography evaluation form

Anatomical Structure	Lesions detected	
Cranial cruciate Ligament visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal appearance <input type="checkbox"/> partial / total rupture <input type="checkbox"/> avulsion : femoral / tibial insertion	
Medial meniscus visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> hypoechogenic <input type="checkbox"/> heterogeneous <input type="checkbox"/> lesion : extrusion / collapsus longitudinal / transverse tear flipped caudal horn	
Lateral meniscus visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> hypoechogenic <input type="checkbox"/> heterogeneous <input type="checkbox"/> lesion : extrusion / collapsus longitudinal / transverse tear flipped caudal horn	
Synovial effusion	<input type="checkbox"/> no <input type="checkbox"/> yes Location :	
Synovial membrane visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> thickened <input type="checkbox"/> hyperechogenic <input type="checkbox"/> mass Location :	
Joint capsule visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> thickened <input type="checkbox"/> tear Location :	
Medial collateral ligament visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear	
Lateral collateral ligament visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear	
Osteocartilaginous lesions		
Osteophytes	<input type="checkbox"/> absent (score 0) <input type="checkbox"/> discrete (score1) <input type="checkbox"/> small, multiple (score 2) <input type="checkbox"/> large, multiple (score 3) Location :.....	
Cartilage	<input type="checkbox"/> normal <input type="checkbox"/> hyperechogenic <input type="checkbox"/> thinned <input type="checkbox"/> thickened <input type="checkbox"/> eburnated Location	
Bone surfaces	<input type="checkbox"/> fractures <input type="checkbox"/> OCD	
Tendon of origin of the long digital extensor muscle visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear <input type="checkbox"/> tendinitis	Popliteus tendon visualised <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear <input type="checkbox"/> tendinitis
Other Caudal cruciate ligament, patellar ligament, sesamoids...	
Conclusions		

Supplementary Table 2: Arthrotomy evaluation form

Anatomical Structure	Lesions detected		
Cranial cruciate Ligament visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal appearance <input type="checkbox"/> partial / total rupture <input type="checkbox"/> avulsion : femoral / tibial insertion		
Medial meniscus visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> lesions : extrusion / collapsus longitudinal / transverse tear flipped caudal horn / bucket-handle tear <input type="checkbox"/> meniscectomy : partial / total		
Lateral meniscus visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> lesions : extrusion / collapsus longitudinal / transverse tear flipped caudal horn / bucket-handle tear <input type="checkbox"/> meniscectomy : partial / total		
Synovial membrane visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> thickened <input type="checkbox"/> villous hypertrophy Localisation :		
Joint capsule visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> thickened <input type="checkbox"/> tear Location :		
Medial collateral ligament visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear		
Lateral collateral ligament visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear		
Osteocartilaginous lesions			
Osteophytes	<input type="checkbox"/> absent (score 0) <input type="checkbox"/> discrete (score1) <input type="checkbox"/> small, multiple (score 2) <input type="checkbox"/> large, multiple (score 3) Location :		
Cartilage	<input type="checkbox"/> normal <input type="checkbox"/> oedematous <input type="checkbox"/> fissured <input type="checkbox"/> eburnated Location :		
Bone surfaces	<input type="checkbox"/> fractures <input type="checkbox"/> OCD		
Description of the synovitis	<input type="checkbox"/> absent <input type="checkbox"/> increased synovial vessel diameter, hyperhaemia <input type="checkbox"/> synovial effusion		
Tendon of origin of the long digital extensor muscle visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear <input type="checkbox"/> tendinitis <input type="checkbox"/> thickened	Popliteus tendon visualised <input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> normal <input type="checkbox"/> partial tear <input type="checkbox"/> complete tear <input type="checkbox"/> tendinitis <input type="checkbox"/> thickened
Other Caudal cruciate ligament, patellar ligament, sesamoids...		
Conclusions			

Supplementary Table 3: Accuracy of stifle ultrasonography for CCL lesions, meniscal lesions and osteophytes (Ar: Arthrotomy, US: Ultrasonography, OS: Osteophyte Score)

		Total rupture	Partial rupture	Not visualisable	
Cranial cruciate ligament	US	1	1	11	Sensitivity 15.4%
	Ar	11	2	0	
Menisci		Meniscal lesion (Ar)	No meniscal lesions (Ar)		Sensitivity 82% Specificity 93% PPV* : 90% NPV** : 88%
	Meniscal lesion (US)	9	1		
	No meniscal lesions (US)	2	14		
Osteophytes		Osteophytes (Ar)	No Osteophytes (Ar)		Sensitivity: 92% Significant correlation OS (US)/ OS (Ar) (p <0.01) OS (US) < OS (Ar) (p <0.05)
	Osteophytes (US)	12	0		
	No Osteophytes (US)	1	0		

Key: * PPV = Positive predictive value; ** NPV = Negative predictive value