COAST Canine OsteoArthritis Staging Tool





Canine osteoarthritis (OA) often goes unnoticed. Subtle changes in your patients' behavior can be warning signs for OA. COAST can help you recognize and treat canine OA from its earliest diagnosed stages to keep your patients comfortable and active throughout their lives.

Summary

- Grading is performed by obtaining both pet owner and veterinarian/veterinary staff evaluations of the patient as indicated.
- For pet owner input, use of a validated Clinical Metrology Instrument (CMI) is recommended by the COAST Development Group. Examples of CMIs include:
 - Liverpool Osteoarthritis in Dogs Index (LOAD)
 - Canine Brief Pain Inventory (CBPI)
 - Helsinki Chronic Pain Index (HCPI-E2)
- Pre-clinical dogs (Stage 0-1) are differentiated by the presence of OA risk factors: breed, intense activity, joint injury or surgery, excess body weight and age.¹

Instructions

- The highest input for "Grade the Dog" and "Grade the Joint" will determine the overall grade for that section.
- The highest grade from evaluating the dog or the joint equates to the patient's final COAST stage.
- Re-evaluate if there is a disparity of two or more grades between the dog and joint results.

Please contact your local Elanco representative for further information about in-clinic tools designed to support and simplify the use of COAST in the veterinary clinic.

COAST Development Group

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The COAST is a proposal for a standardized staging system for canine (OA). Please contact the COAST Development Group at the above email with feedback/information that can be used to further develop and optimize this tool.

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 Cachon T, Frykman O, Innes J, et al. Face validity of a proposed tool for staging canine osteoarthritis: Canine OsteoArthritis Staging Tool (COAST). Vet J. 2018;235:1-8.





Grade the Dog

NER ENTS	Clinical Metrology Instrument (CMI)	Not Clinically Affected 0	Mildly Affected 1-10	Moderately Affected 11-20	Severely Affected 21+	
PET OWNER ASSESSMENTS	Degree of Dog's Discomfort	None O	Low	Moderate	High	
	Static Posture	Normal	Mildly Abnormal	Moderately Abnormal	Severely Abnormal	
EVALUATION BY VETERINARIAN		Breed-appropriate with proper limb loading and normal body weight distribution between forelimbs and hindlimbs.	Subtle abnormality in limb loading and light shift in body weight distribution.	Clear abnormality in limb loading and obvious shift in body weight distribution.	Stands with difficulty and unease. Severe shift in body weight distribution.	
	Motion	Normal	Mildly Abnormal	Moderately Abnormal	Severely Abnormal	
		Fluent and symmetric gait with appropriate weight bearing and body weight distribution.	Subtle lameness, asymmetry and gait stiffness. Possible impact with some activities, yet no difficulty getting up.	Consistent gait abnormalities and some difficulty getting up, obvious stiffness, change in body weight, and reduction in use of affected limb.	Severe weight shift and lameness. Has difficulty getting up and struggles to move.	

Grade the Joint Pain Upon Manipulation None Mild Moderate Severe 0 0 0 0 Severely Abnormal Mildly Abnormal Moderately Abnormal **Passive Range of Movement** Normal 0 0 0 0 Slight joint thickening with minimal ROM reduction and Clear joint thickening with obvious ROM reduction and muscle atrophy. Extremely limited ROM with severe muscle atrophy, joint thickening and no crepitus. crepitus. Anatomical misalignment and loss of normality on palpation. Mild Signs of OA Radiography No Signs of OA Moderate Signs of OA Severe Signs of OA 0 0 0 0 If preclinical "at risk," the dog may have evidence of risk factors such as dysplasia and/or trauma. Early signs of OA and minimal osteophytes. Advanced osteophytes and remodeling.

Stage of OA	*	DOG GRADE	JOINT GRADE		
STAGE 0-1 PRE-CLINICAL	STAGE 2 MILD	STAGE 3 MODERATE	STAGE 4 SEVERE		
	COAST Stage of Ca	*Re-evaluate if there is disparity dog and joint results.	of two or more grades between		

