

Montreal Instrument for Cat Arthritis Testing, for Veterinarian use [MI-CAT(V)]

Evaluation Procedure

Perform the evaluation by observing the cat from a distance. Place the cat on the floor and observe its undisturbed behavior, posture, and movements.

Stimulate walking, running, jumping, playing, *etc.* Toss treats or use toys (*e.g.* cotton ball, strings) for it to chase. Call, gesture enticingly or pet the cat to encourage it to approach the evaluator.

Criterion 1. Assess **Body Posture** both with the cat standing still and during locomotion.

Criterion 2. Observe **Gait** from all perspectives (including from above). If needed, use encouragement to stimulate the cat to walk, run and turn.

Do not physically push or pull the cat, nor guide it by a leash or collar, nor startle it. These will interfere with natural movements.

Criterion 3. Assess **Obstacles** by encouraging the cat to pass under a low and adjustable overhead obstacle of approx. its elbow height (*e.g.*, rungs of a cart or gurney...height around 12-17 cm). Encourage the cat to jump down using a raised horizontal surface (*e.g.*, bench, shelf, chair, low table ... height around 76 cm). Jump height measurement is a good discriminatory factor in discomfort as severely affected cats will lean on the vertical support with the thoracic limbs in the hope to reduce the jump size. A rescue stair could be available as alternative to give the choice to the osteoarthritic cat to either jump down or use the rescue stair.

Criterion 4. Complete the **Global Distance Exam** based on your global subjective impression.

NOTE: Cats with osteoarthritis do not necessarily demonstrate all of the abnormalities described below.

Scoring of Abnormality

Each item (criterion) should be scored in terms of **Degree of Alteration** as indicated for each criterion. If an item cannot be evaluated, its maximum score will be deducted from the criterion maximum score.

Assessment Criteria	Degree of Alteration			Score
	Normal	Mild	(in intensity or duration) Clear/Obvious	
1. Body Posture				
A. Stands with hind limbs held far forward under body	0	1	3	
B. Increased forelimb flexion	0	1	3	
C. Increased hind limb flexion	0	1	3	
D. Hind limb asymmetry (right to left)	0	1	3	

Assessment Criteria	Degree of Alteration				Score	
	Normal	Possible	(or doubtful)	Clear/Obvious		
2. Gait						
A. Appears to move slowly	0	1		3		
B. Forelimb stiffness/lameness	0	1		3		
C. Hind limb stiffness/lameness	0	1		3		
D. Forelimb joints – reduced range of motion	0	1		3		
E. Hind limb joints – reduced range of motion	0	1		3		
F. Lateral movements of spine at walk	0	1		3		
Total score (add items A to F)						
Maximum score = □□ (subtract □ for each unscored item)						
3. Obstacles						
A. Difficulty passing under an overhead obstacle	0 (easy)	1 (not so easy)	2 (hesitant)	3 (difficult)	4 (no attempt)	
Speed						
Willingness						
Scrape loudness						
B. Front feet land heavily (audibly/visibly) when jumping down	0 (not perceptible)	1 (noisy)	3 (loud)	4 (no attempt)	Preferential use of rescue stair 4	
Hind feet land heavily (audibly/visibly) when jumping down	0 (not perceptible)	1 (noisy)	3 (loud)	4 (no attempt)	Preferential use of rescue stair 4	
Total score (add items A to B)						
Maximum score = □□ (subtract □ for each unscored item)						
4. Global Distance Examination						
No mobility impairment					Worst possible OA-related mobility impairment	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1	2	3	4	5	6	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	8	9	10			
Score						
Maximum score = 10						
(A) MI-CAT(V) Total score (add scores from criteria 1 to 4)						
(B) Maximum scale score = □□ (subtract as needed for unanswered items)						
Total score (add items A to D)						
Maximum score = □□ (subtract □ for each unscored item)						