	Most Common Sport related Elbow Diseases Seen in Practice	
	MSK Ultrasonography -The Fore Limb Canine Sport Medicine Espoo - Finland 2023	
and and and		
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Medial coronoid disease=MCD

Past- Medial coronoid fragmentation

Medial coronoid disease (MCD)-the most common component of elbow dysplasia.





Medial Coronoid Disease

Many publications over the past four decades.

The first signs-as early as <u>three months of age</u>, as late as six years, or even older.

The most <u>common signs</u> - lameness, stiffness, shortened steps, supination and abduction of the affected forelimb.













Ethiopathogenesis

Despite of the extensive research, pathogenic mechanism still remains uncertain.

Complex and multifactorial.



Diagnostic Imaging

Ideal diagnostic approach (consistent and accurate) for MCD has not been established.





Diagnostic Imaging

Radiography Ultrasound

Arthroscopy

Computer tomography

The earliest signs found with CT (14 weeks) -mineralized bone fragment at the base of the MCP.



Diagnostic Imaging -Ultrasonography

> Vet Comp Orthop Traumatol. 2023 May;36(3):132-138. doi: 10.1055/s-0042-1760637. Epub 2023 Feb 1.

Use of Ultrasonography in Diagnosis of Medial Compartment Disease of the Elbow in Dogs

Maxime Jacqmin 3 , Wronique Livet 2 , Juliette Sonet 3 , Mathieu Harel 3 , Eric Viguler 2 , Pierre Henri Moissonnier 3 , Thibaut Cachon 2

Abstract

Objective: The objective of this prospective study was to evaluate the use of ultrasonography in the diagnosis of medial coronoid process disease in unclear cases.

The diagnosts of model common process diverses in under cases. **Brudy design:** Filter belows in thistere design for which radiogness and compared temporary did not lead to a class of dayons of model common process disease were included. This should be process the second of the point any professional second below. Intercostic were interpreted for the point any profession diverse of untracostic were interpreted for the point any profession diverse of untracostic were interpreted for the point any profession diverse of the model common diverse regular. Historiae ware profession diverse of the second register diverse regular. Historiae ware profession diverse of the second common diverse regular. Historiae the finamential (UNI):

Instal counting process pregnate, invertiend in application (proj.) Conclusion: Utacompany can be helpful additional disposite too to confirm medial coronaid process disease of the elboy joich barder performing anthroscopy in unclear cases. Further studies will be needed to enablate the use of higher frequency transducers and determine it it could improve the diagnostic value of ultrasonography.





3 JAm Vet Med Anne: 2009 Feb 15:234(4):400-5 doi: 10.2460(Jamma 2344.480. Accuracy of ultrasonography in detecting fragmentation of the medial coronoid process in	R FMCP
dogs Deniz Skyrek-Intas ¹ , Ursula Michele, Stabine Tacke, Martin Kramer, Martin Genwing	
Abstract Objective: To determine the accuracy of ultraceoperative in detertion fragmentation of the medial	
Corporal process (FACP) in days. Design: Cross-section study.	Figure 2— iransverse utrasonographic image of the medial as- pect of the elbow, joint in a dog with fragmentation of the MCP A small fragment of the medial connoid process (FMCP) is evident as a short hypercoholic line with distal shadow (arrow) between
Animalis: 102 dogs (112 elbow joints) suspected to have FMCP. Preventures: Filmus ware anomined ultracenomicabilitation for to summary for solitonee of	the radius (R) and the u(na (U).
Inagenetation, fissuring, or deformation of the medial coronal processing is the leave of the joint capavely, joint effusion; and secondary new bone formation. Results were compared with intracegnities findings.	
Results: A surgery, D (40%) (birts had free fragments, D (40%) had nondisplaced fragments, and (8%), did not have any fragments or fissures. Fragments ware not save utracompapilically in 23 of the 51 (46%), birts in which a free fragment was found during surgery or in 50 of the 55 101%) birts in a which a sometimeter fragment ware found during surgery or in 50 of the 55	MCP U R
diffusiongraphic evidence of any medial control grootes alternary of provide of any diffusion of the second second second second process, or both) for diagnosis of medial control grootes fragmentation war 27%. The kepp control free for the first of agreement between ultracorregrepcie (is, any medial control grootes abnormality) and surgical findings was and the direction to the wars and a manement.	
Conclusions and clinical relevance: Results suggested that ultrasonography was of limited diagnostic value in distecting PMCP in dogs.	rigure 3—1ranswerse unascrogrephic image of the model as- pect of the elsow joint in a dog with fragmentation of the MCP. The contour of the radius IRI is smooth, but the contour of the una (U) is undukting with a discontinuity and step formation in the region of the MCP indicating that the MCP has an abnormal shape. Whether there is a free fragment (travo) can only be ver-





Common in Cats - Rare in Dogs (mostly Lateral)

Anconeus prevents medial translation and rotation Medial epicondyle prominent containing effect Lateral Collateral Ligament stronger than in cats

> 50% rupture of both collateral ligaments Rarely rupture or avulsion origin of the flexor and extensor tendons



Evaluation of Collateral Ligaments	Supination	Pronation
External rotation of paw	14/1	12 m
Intact- 40°/45°		
Ruptured medial collateral ligament- 90°	en°.	40°
Internal rotation of paw	00	40
Intact- 70°		
Ruptured lateral collateral ligament- 140°	ignored P P	*

TRICEPS TENDON AVULSION

Partial or complete detachment from olecranon

Symptoms: acute lameness

Pain during direct palpation and flexion of the elbow. Palpable defect at insertion site









Sclerosis and periosteal reaction medial epicondyle



Media humeral epicondylar lesions Arview of the literature Tester for a for a

