

This puppy is not able to walk. What can we do?

Can ultrasound detect the cause of the abnormal gait in this puppy?

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Diagnostic Mindset



Thanks to www.imaio.com

Mimi, English Setter, FI, 3 months

- Not able to walk since birth
- The breeder wants euthanasia
- Adopted
- What can be done for this puppy?



Mimi, FI, 3 months



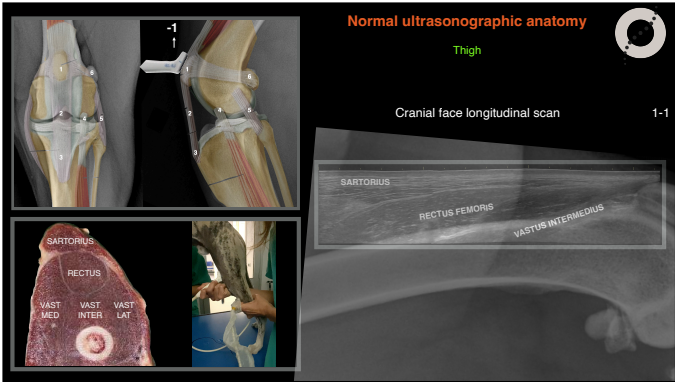
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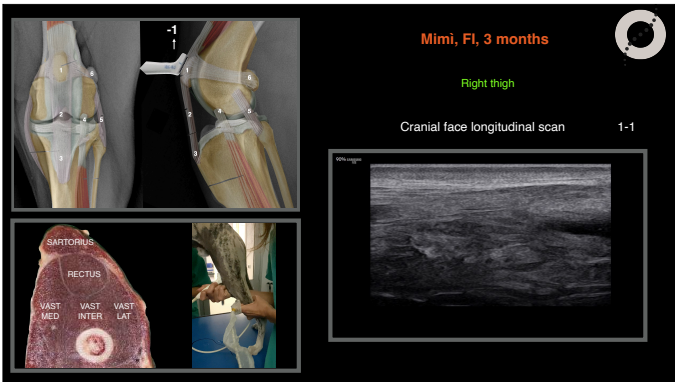


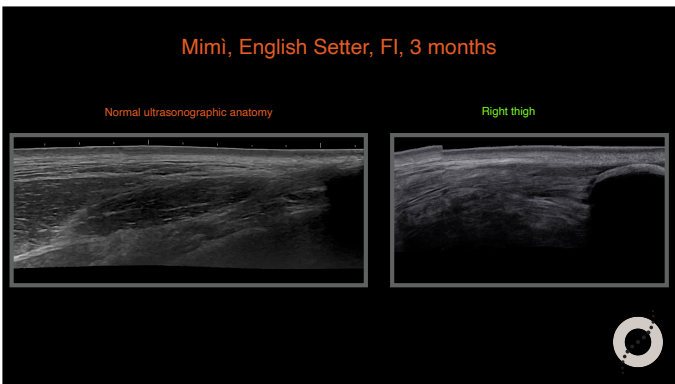
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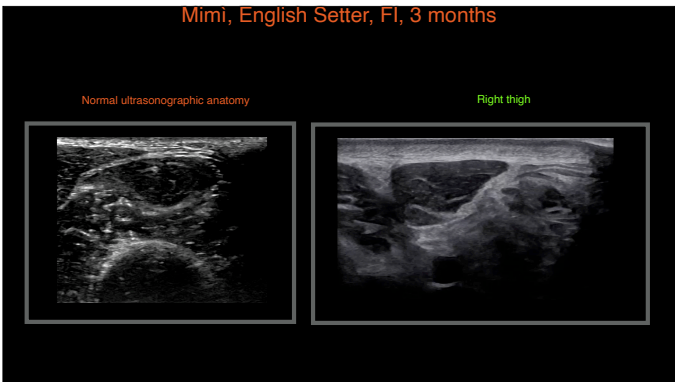
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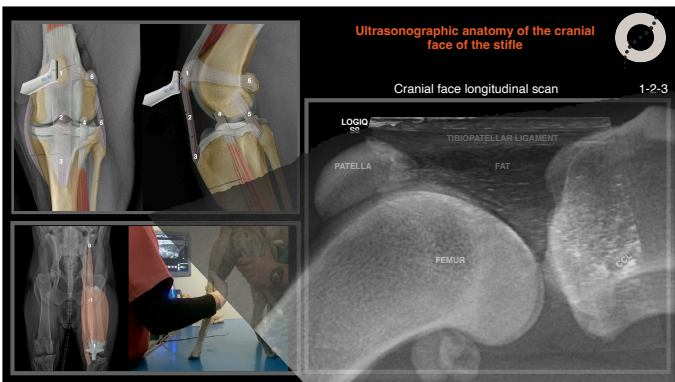












Mimi, FI, 3 months
Right thigh
Cranial face longitudinal scan 1-2-3

The slide contains four images: two anatomical diagrams of a dog's right thigh joint, a photograph of a person performing an ultrasound on a dog's thigh, and a large ultrasound image showing a cranial face longitudinal scan of the joint.

Mimi, English Setter, FI, 3 months


Ultrasonographic diagnoses:

- What is your ultrasonographic diagnosis?
- Please write your report
- What will you do next?

A profile photograph of a dog's head, likely an English Setter, with its mouth open and tongue out.

How to arrive to Conclusions:

- PE examination
- X-rays, blood works...
- Ultrasonographic findings
- Literature

A profile photograph of a dog's head, likely an English Setter, with its mouth open and tongue out.

PubMed®

quadriceps canine contracture

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Page 1 of 1

RESULTS BY YEAR

PUBLICATION DATE

1 year

5 years

10 years

1 **Quadriceps contracture in dogs.**

Bardet JF, Hohn RB.

J Am Vet Med Assoc. 1983 Sep 15;183(6):680-5.

Cite

PMID: 6355030 Review. No abstract available.

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2 **Quadriceps contracture and fracture disease.**

Bardet JF.

Vet Clin North Am Small Anim Pract. 1987 Jul;17(4):957-73. doi: 10.1016/s0195-5616(87)50087-0.

Cite

PMID: 3303637 Review.

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Fracture disease, which is a complication of fracture treatment and immobilization, is defined as atrophy of bone, soft tissues, nail, skin, and cartilage. This condition is most often seen in **dogs** with **quadriceps contracture**. Distal femoral fractures treated ...

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ELSEVIER

Hind limb ossification centre hypoplasia and deformities induced by quadriceps contracture: Radiographic and Computed Tomographic study in 13 Doberman Pinscher littermates

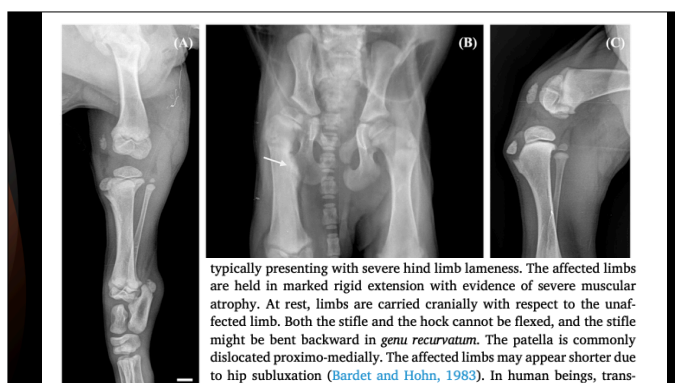
Maria Elena Andreis¹, Umberto Polito, Silvia Clotilde Modina¹, Liliiana Maria Carnevale, Maria Cristina Veronesi, Alessia Di Giancamillo, Paola Roccabianca, Mauro Di Giancamillo

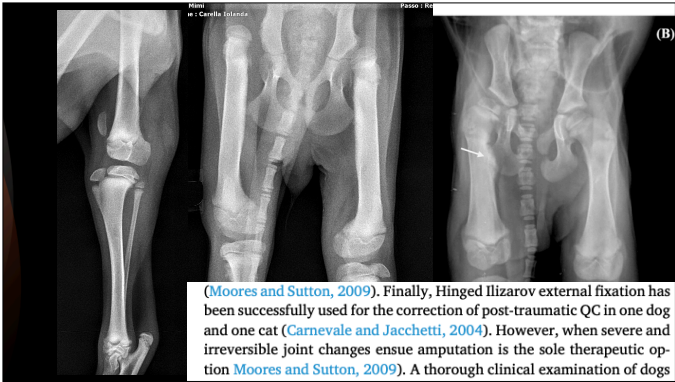
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ARTICLE INFO

ABSTRACT

Quadriceps contracture (QC) is reported in dogs mainly as a complication of trauma or parasitic infection. QC causes progressive hind limb deviation, muscular hypertrophy and degenerative joint disease and, in puppies, bone hypoplasia. The aim of this clinical case series is to describe the radiographic and computed tomographic (CT) changes in hind limb ossification centres in thirteen 55 to 97-day-old Doberman Pinscher related littermates induced by QC after repeated intramuscular injections. The presence, size, and shape of ossification centres of affected and unaffected hind limbs were compared. Affected limbs were hyperextended and externally rotated, with ante-recurrence and proximo-medial patellar location. QC had no influence on the time of appearance of ossification centres however, it was associated with femoral head flattening, hip subluxation, flattening of the femoral distal epiphysis. The tibial plateau was tilted caudoproximally-cranioventrally and wedged into the growth plate. Thirty-two out of fifty ossification centres (including distal femoral and epiphyseal centres, such as femoral head and tibial plateau) were significantly smaller in affected limbs ($p < 0.005$). Lack of weight bearing could account for the smaller size of ossification centres in affected limb and metastases. Progressive limb hypoplasia and internal rotation might have induced gradual loading withdrawal on the medial aspect of the distal femoral epiphysis. The reduced size observed only for the medial ossification centres of the distal femoral limb. To the best of our knowledge, this is the first study describing CT findings of hind limb ossification centre changes in puppies with QC contracture.





(Moore and Sutton, 2009). Finally, Hinged Ilizarov external fixation has been successfully used for the correction of post-traumatic QC in one dog and one cat (Carnevale and Jacchetti, 2004). However, when severe and irreversible joint changes ensue amputation is the sole therapeutic option (Moore and Sutton, 2009). A thorough clinical examination of dogs

Mimi, English Setter, FI, 3 months

Conclusions

- Started physical exercises to improve abdominal core
- Follow up to decide if supporting harness needed



Thank you



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