



CASE STUDY

Standing equine MRI

A 4-year-old BWP gelding presented with acute onset left forelimb lameness

Clinical findings

A 4-year-old BWP gelding presented with acute onset left forelimb lameness

History

A 4-year-old BWP gelding presented with acute onset left forelimb lameness.

Clinical examination

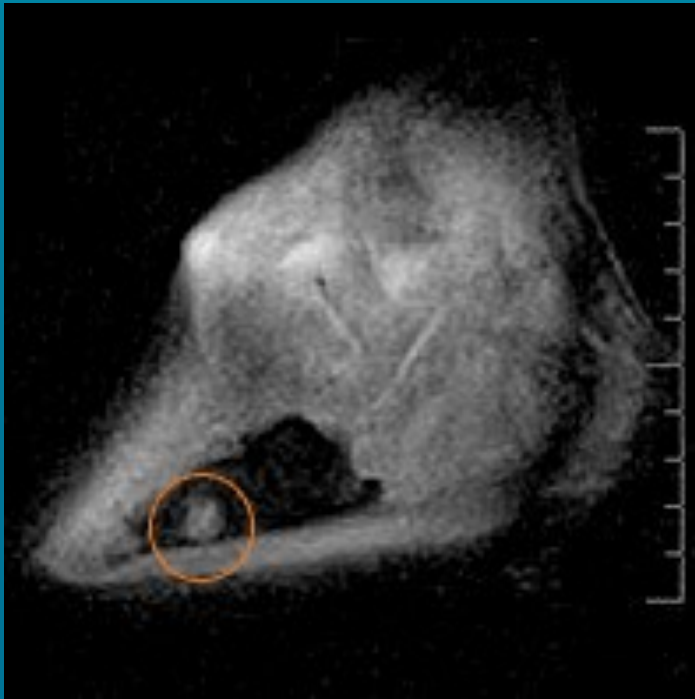
Examination revealed a 4/5 (AAEP lameness grade) left forelimb lameness. Given the severity of lameness, the veterinarian elected not to perform diagnostic analgesia.

Radiographic findings

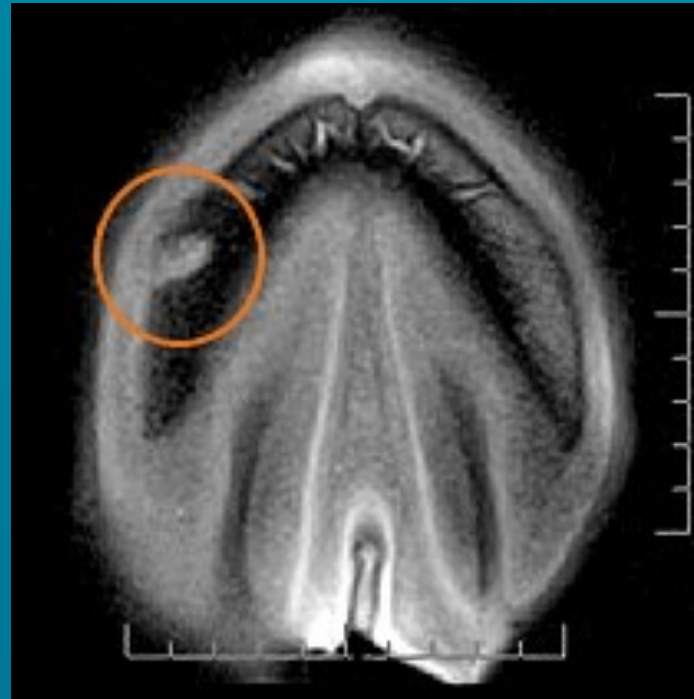
Radiographs illustrated a focal, well margined, round, osteolytic lesion on the medial border of the third phalanx. Differential diagnoses included keratoma and subsolar abscess, and further investigation via MRI was performed.

MRI findings

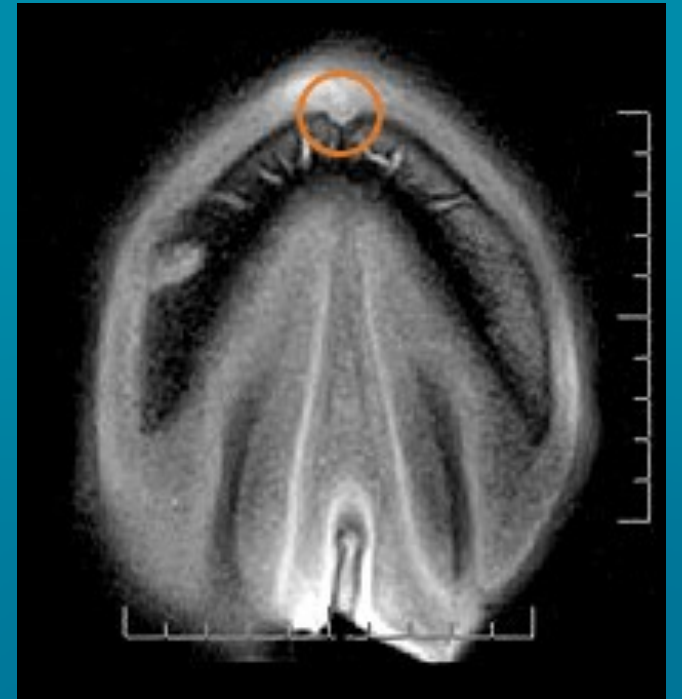
A focal, rounded area of increased mixed signal was present on T1 and T2-weighted sequences (1&2) in the external two thirds of the medial aspect of the distal phalanx consistent with the radiographic findings. The MRI findings indicated a potential of a proteinaceous substance present resulting in the lesion. A second defect present at the dorsal tip of P3 was most likely physiologically normal, consistent with the *crena marginalis* (3).



(1) Parasagittal T1 3D, slice positioned medial of midline



(2) Transverse T1 GRE

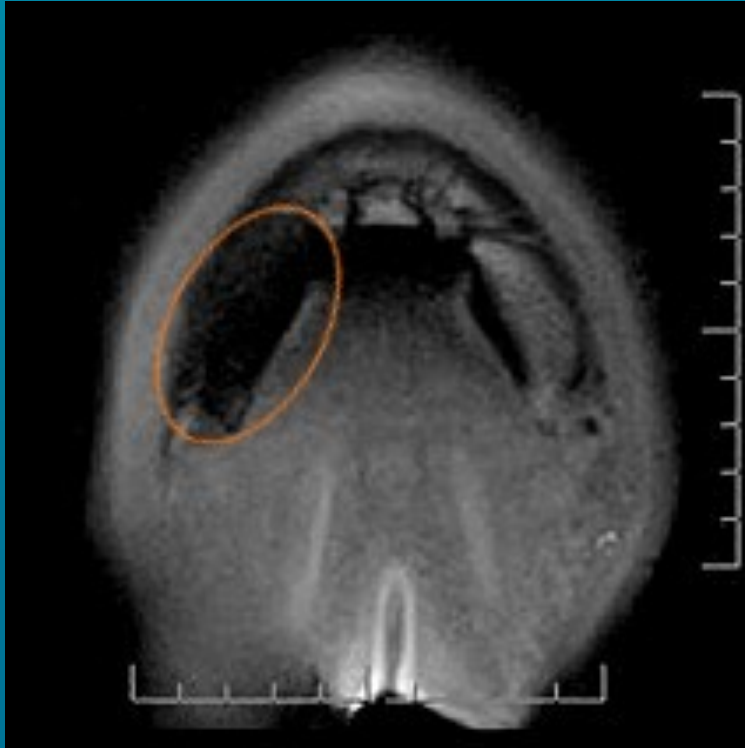


(3) Transverse T1 GRE

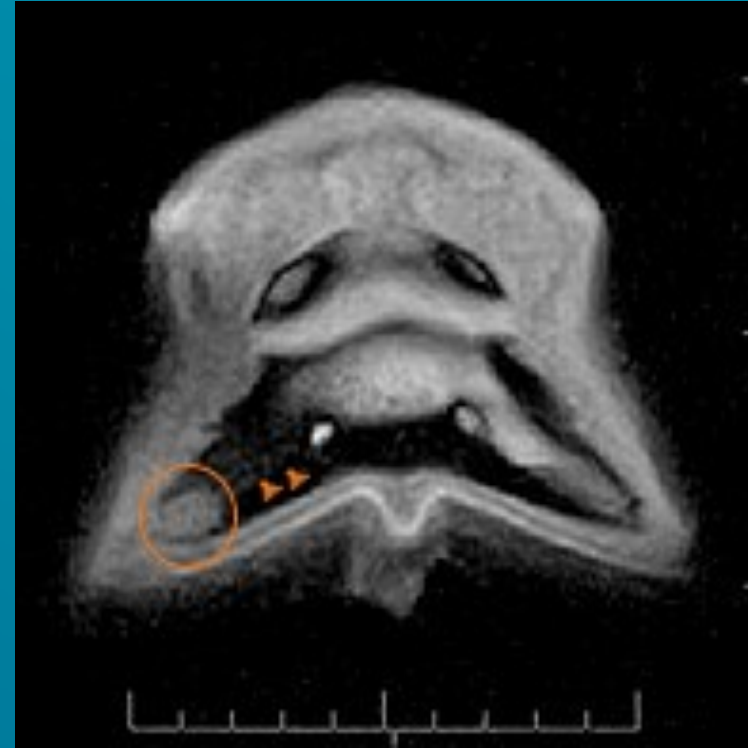
The defect at the tip of P3 is most likely the *crena marginalis*.

MRI findings

Proximal to the well margined area of increased signal, the medial third of the distal phalanx had diffuse low signal likely signifying diffuse moderate sclerosis. The laminae covering the bony lesion appeared normal. On the basis of this finding, differential diagnosis of a keratoma was dismissed.



Transverse T1 GRE



Frontal T1 GRE, circle indicates focal increased signal, arrow heads showing the diffuse low signal in the medial third of the distal phalanx suggestive of moderate sclerosis

Conclusion

Diagnosis and Treatment: The lesion was curetted via surgical access through the sole with resolution of, of the lameness to grade 1/5 (AAEP lameness grading) immediately post-surgery. The material curetted from the lesion was pus and necrotic debris, consistent with a sub-solar abscess.

Prognosis: The horse continued to improve after surgery, with the surgical site managed until completely healed. The horse successfully returned to work 3 months after surgical debridement.



Links in this study have been provided by
Vetstream's Vetlexicon Equis:



In association with:



Images and interpretation:

Bosdreef

Dr Filip Vandenberghe LA ECVDI and his team

Website: www.bosdreef.be/en/horses



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