

The Elbow Enigma Elbow dysplasia trends, Medial Coronoid Disease and CT scanning

Poster Summary

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**Vision Australia
Seeing Eye Dogs**

Elbow dysplasia

- Selection against elbow dysplasia (ED) is a critical component of working dog breeding programs as ED is a cause of early work breakdown
- One of the most common causes of lameness and elbow dysplasia in Labradors has been shown to be medial coronoid disease (MCD)
- The appearance of MCD in dogs from our colony that had previously been cleared through traditional elbow screening programs led to review of results and screening processes
- Further research into the degree of correlation between environmental factors, x-rays results, CT scan results and clinical outcomes is required
- This poster reports on our experience to date with MCD and revised screening recommendations to minimise its impact



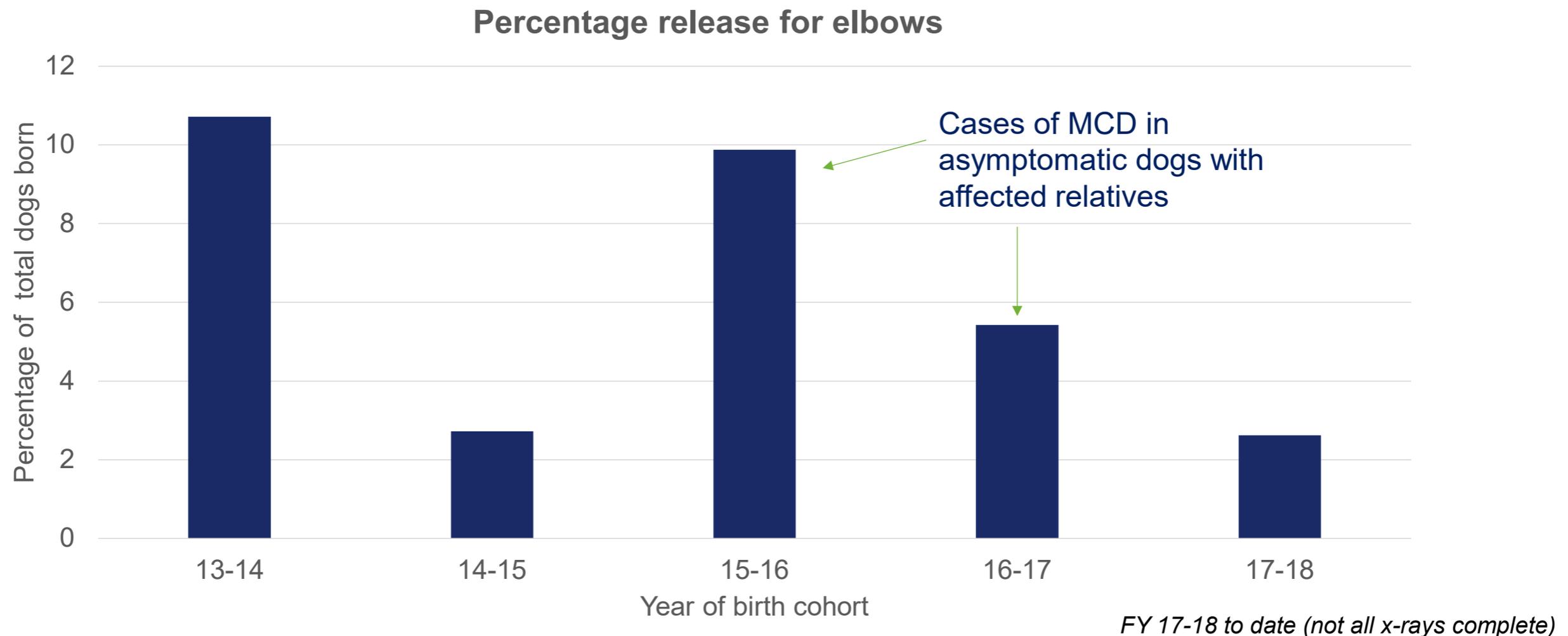
Image 1: Plain lateral flexed elbow x-ray

Image 1 (left) shows clear screening radiographs. Image 2 (right) shows fragmentation (arrow) of medial coronoid process in same dog.



Image 2: CT scan cross sectional slice

What is the trend in incidence of elbow dysplasia in our population?

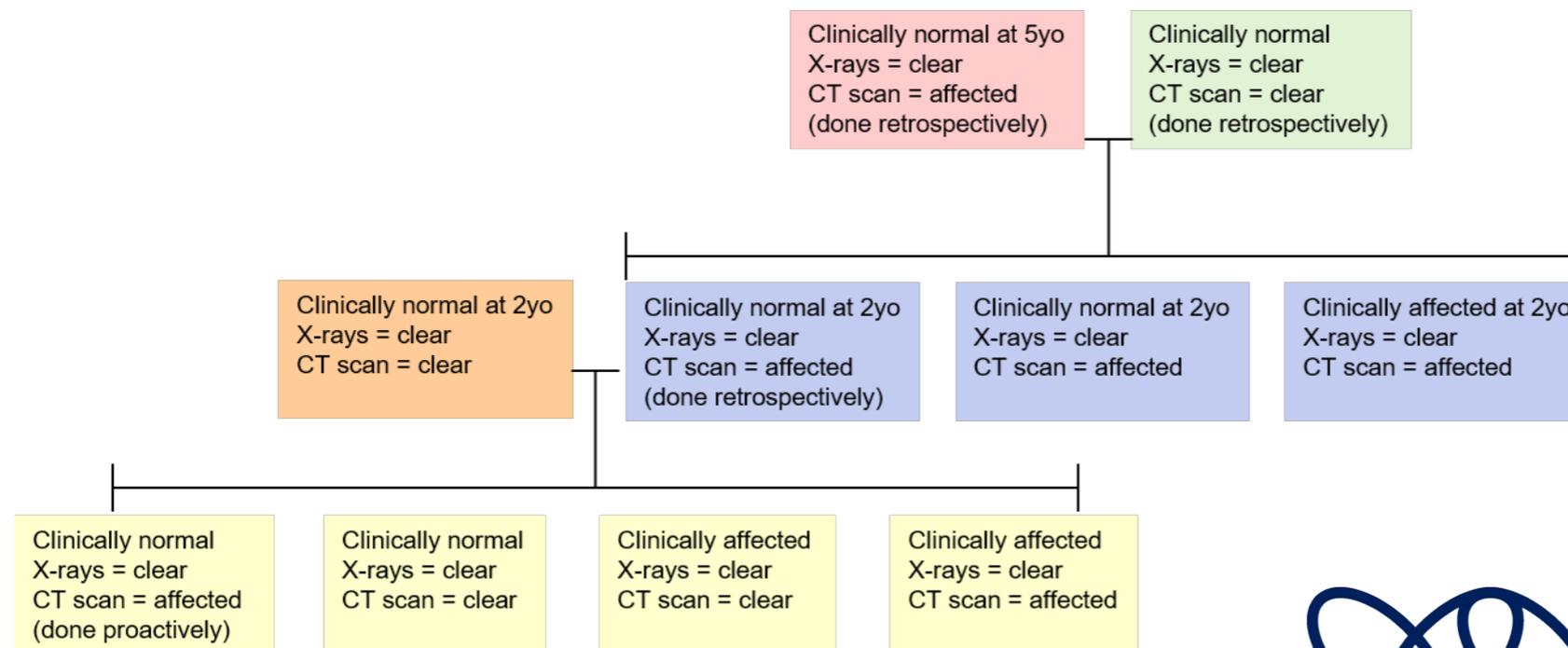


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Medial coronoid disease; Why is it so tricky to detect

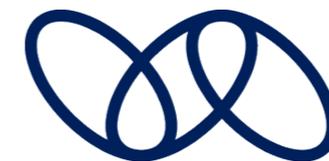
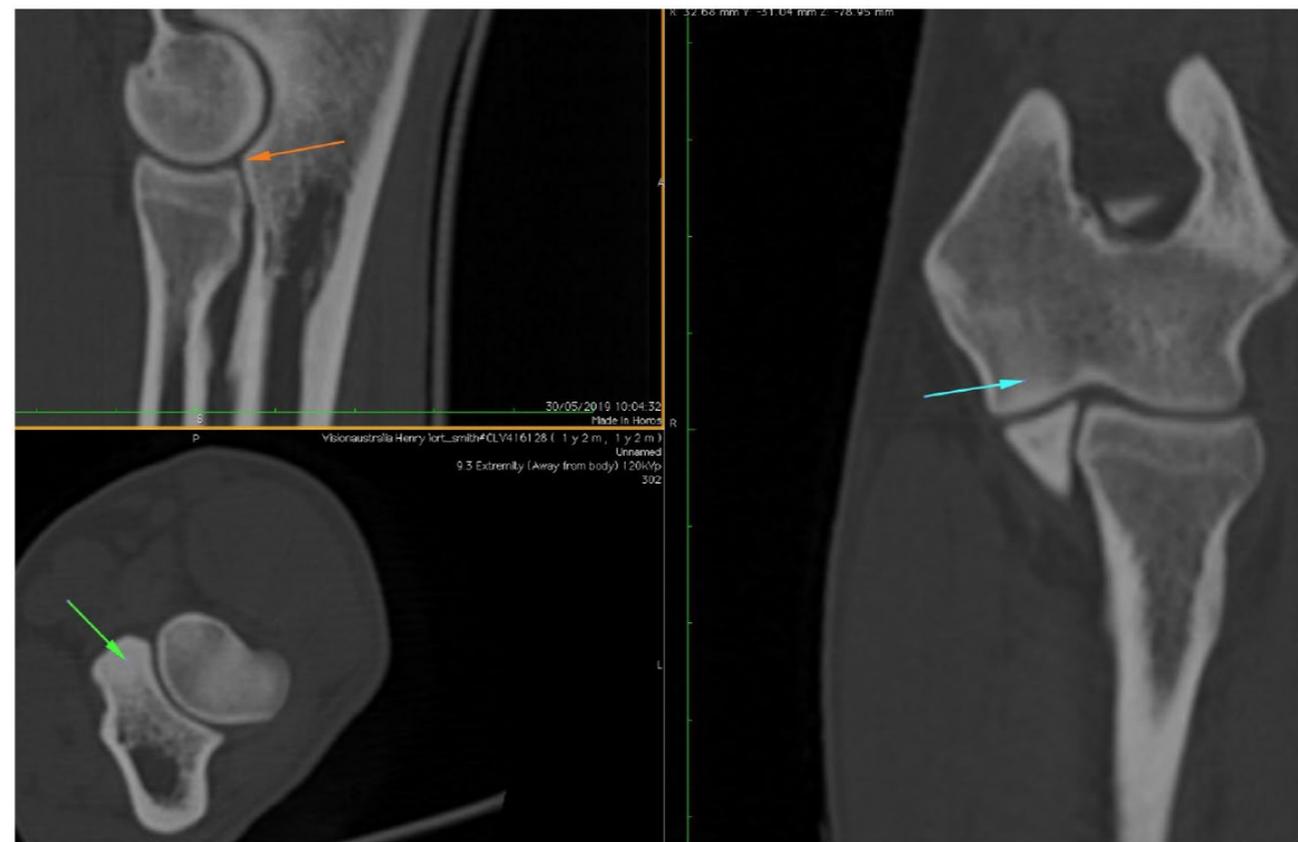
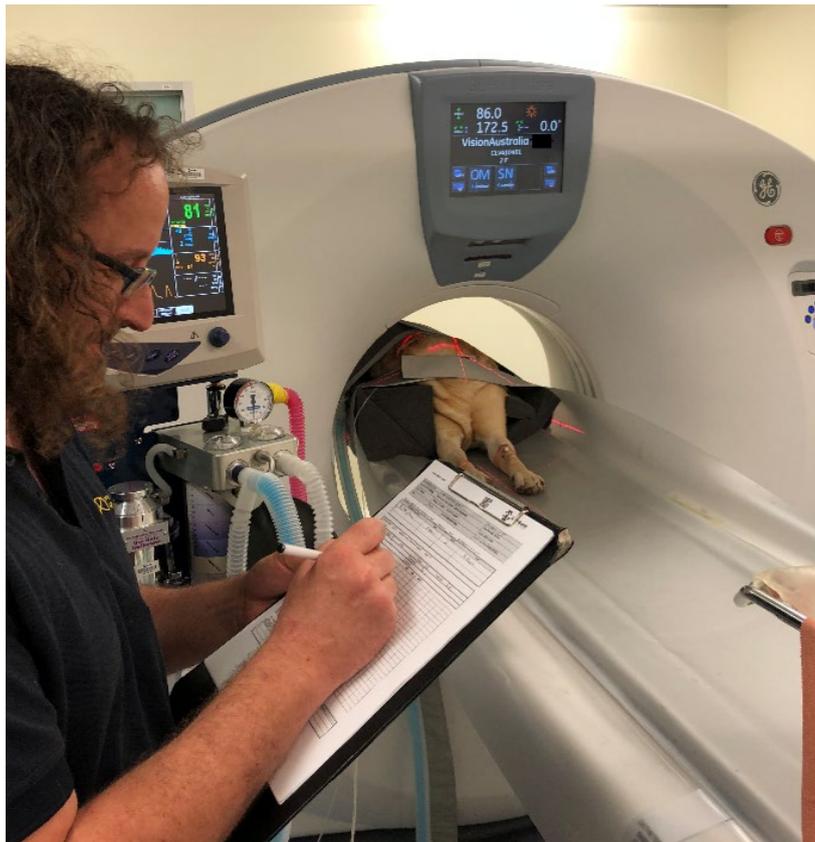
Inconsistent correlation between clinical presentation, phenotype and genotype

- Affected dogs can screen clear on plain lateral radiographs at 12 months of age and beyond
- Low sensitivity of plain lateral radiographs to detect fragmentation
- Inconsistent correlation between radiographic findings and CT scan results
- Sub-clinical carriers – not all affected dogs show clinical signs even with advanced changes on CT scan



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Outcomes; CT scanning Updated x-ray protocol



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References

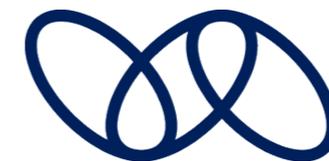
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