

### Chronic Fracture of the 4<sup>th</sup> cervical vertebrae ?

A 4 year old gelding was presented at Clyde Vet Group Equine Hospital for a history of suspect neck “stiffness”. The horse was in the early stages of being backed and appeared to be resistant to neck flexion. The gelding had been in the owner’s possession for 12 months and history prior to purchase was unknown.

Examination when led in-hand on a firm level surface revealed the horse to be sound in both walk and trot. A full neurological examination, including assessment of all cranial nerves, was undertaken and revealed no significant abnormalities.

Clinical examination revealed the gelding to be reluctant to flex the neck in a lateral direction, particularly to the left. Mild asymmetry of neck musculature was noted in the mid cervical area.

Due to the clinical signs radiographic assessment of the neck was undertaken. This revealed the body of C4 to be grossly distorted and compressed. Destruction of the disc space between C3 and C4 was present. Interestingly the dorsal laminae of C4 vertebrae appeared unaffected.

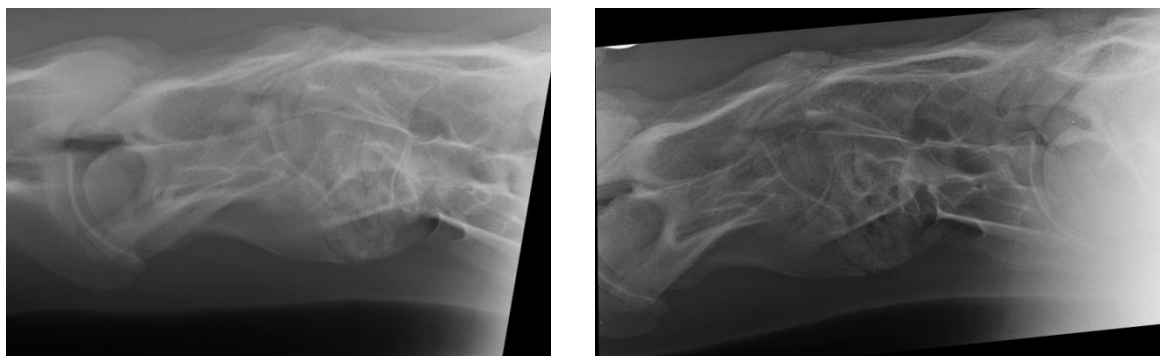


Fig 1 &2 lateral radiographs of the cervical vertebrae

This abnormality was assumed to have happened following ‘healing’ of a compression fracture of C4. Amazingly, despite the radiographic appearance, measurements of the intra-vertebral and inter-vertebral mean sagittal diameter ratios (MSDR) of the vertebral foramen appeared to be within normal limits. The distortion of the body of the 4<sup>th</sup> vertebrae meant this was not accurate.

It was suspected the horse may have suffered a fractured neck at a young age.

The absence of apparent abnormal MSDR corresponds with the lack of ataxia or any proprioceptive defects.