

Occipitoatlantoaxial Malformation

A neurologic condition caused by inherited bone deformities in the spinal column in Arabian Horses

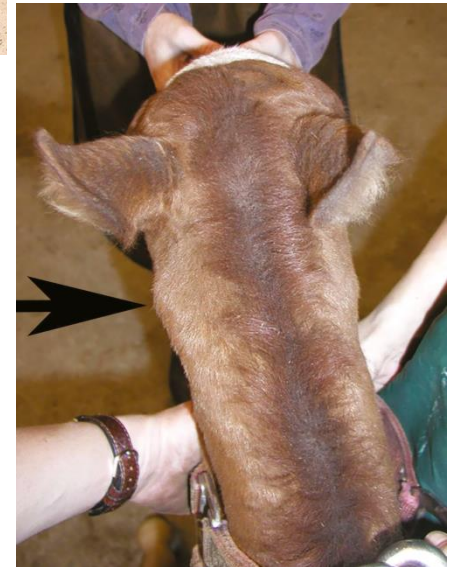
-Finno Lab

The Phenotype

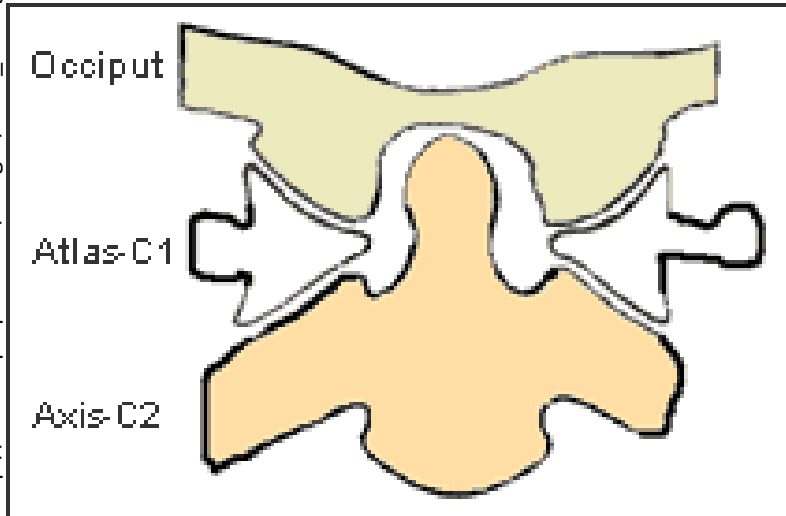
- Ataxia or tetraparesis
- Abnormal Head Position
- Progressive ataxia
- Extended neck posture
- Clicking noise during flexion and extension
- Still born



<http://horsebreedslist.com/Content/horse-images/97/big/arabian-picture-1.jpg>



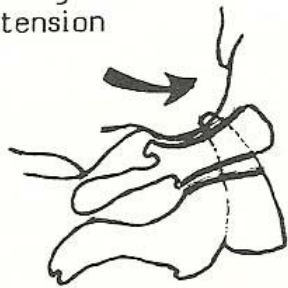
Occipitoatlantoaxial malformation (OAAM)



X-Ray: Lateral View, OAAM Affect Horse



15 degrees extension



10 degrees flexion

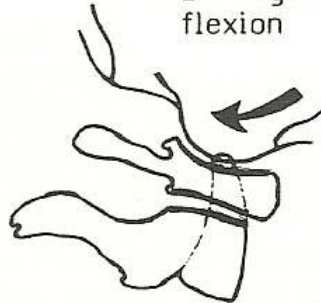


Figure 3.10. Occipitoatlantal flexion and extension (Courtesy ACAP).

Data Creation

- Whole Genome sequencing
 - 13 X coverage
 - 2 affected foals
- Variant Analysis
- Sanger sequencing of additional individuals

