

## CORA-BASED LEVELING OSTEOTOMY: SURGICAL RESOLUTION OF CRANIAL CRUCIATE LIGAMENT RUPTURE



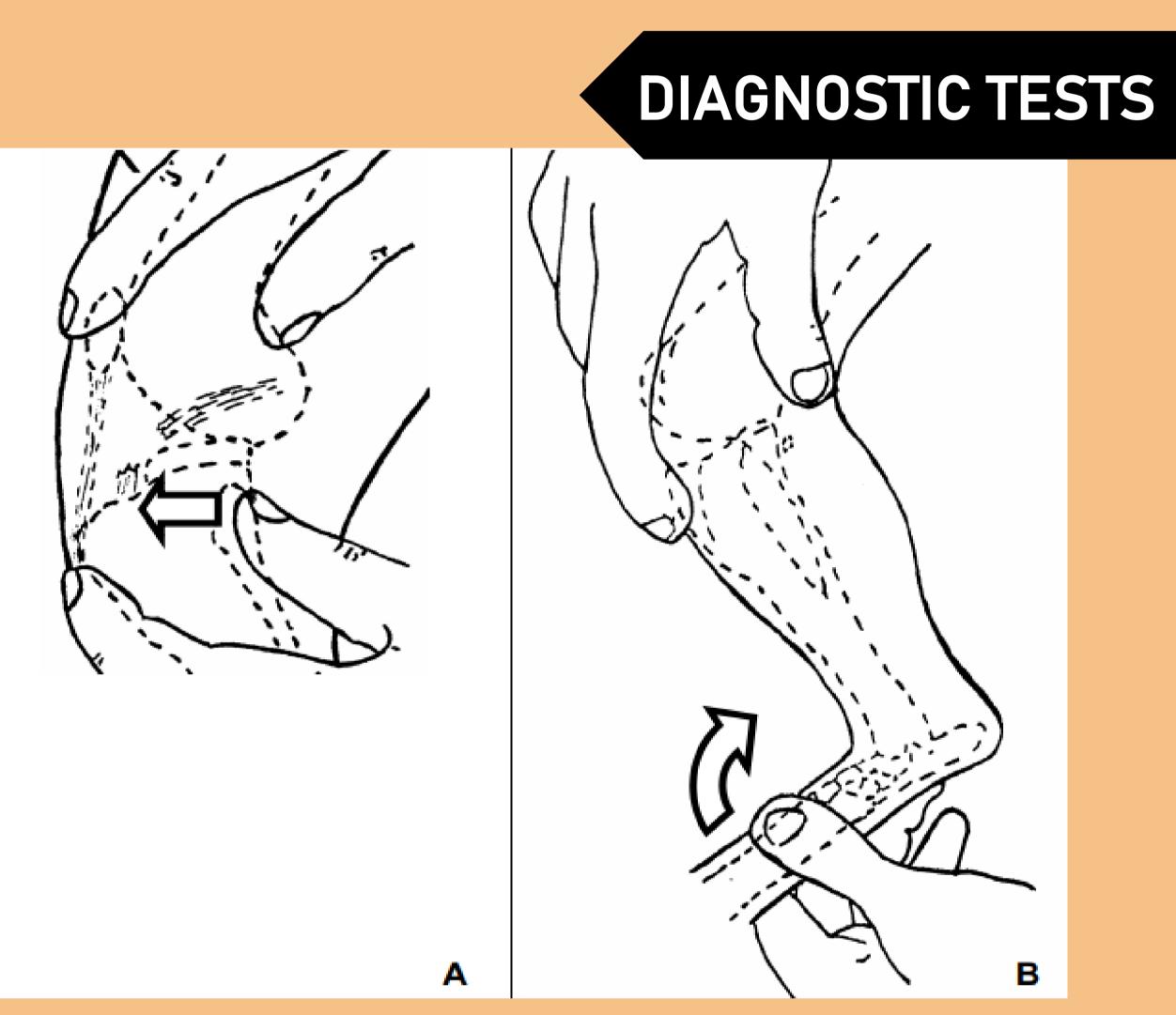
**OBJECTIVES** 

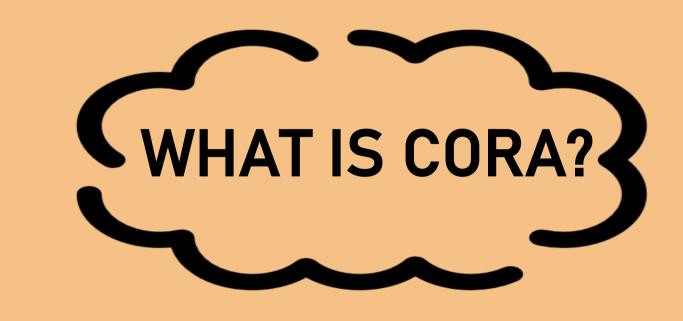
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Hind limb lameness is a common cause of small animal clinic appointments.
 This lameness is usually caused by rupture of the cranial cruciate ligament (CCL).
 CORA-Based Leveling Osteotomy (CBLO) helps giving a new conformation of the stifle, preventing tibial thrust.

 Identify what we know about CBLO.
 Do a comparative study with Tibial Plateau Leveling Osteotomy (TPLO).
 Decide if CBLO is a good option to treat cranial cruciate ligament rupture.





CORA goes for Center of Rotation of Angulation.
 It is the intersection of the mid-diaphyseal and mid-proximal lines of the tibia.
 There is a distal and proximal CORA, not aligned because of the *procurvatum* of the dog.
 This misalignment gives us the angle of the CORA.

**Figure 1.** Position test to check the instability of the stifle. Drawer movement test (A) and tibial compression test (B). de Rooster 2001

## **CORA-BASED LEVELING OSTEOTOMY**

Osteotomy at the most distal part of the tibial tuberosity.
Just a few complications, easy to resolve.
It can be done in skeletally immature animals.

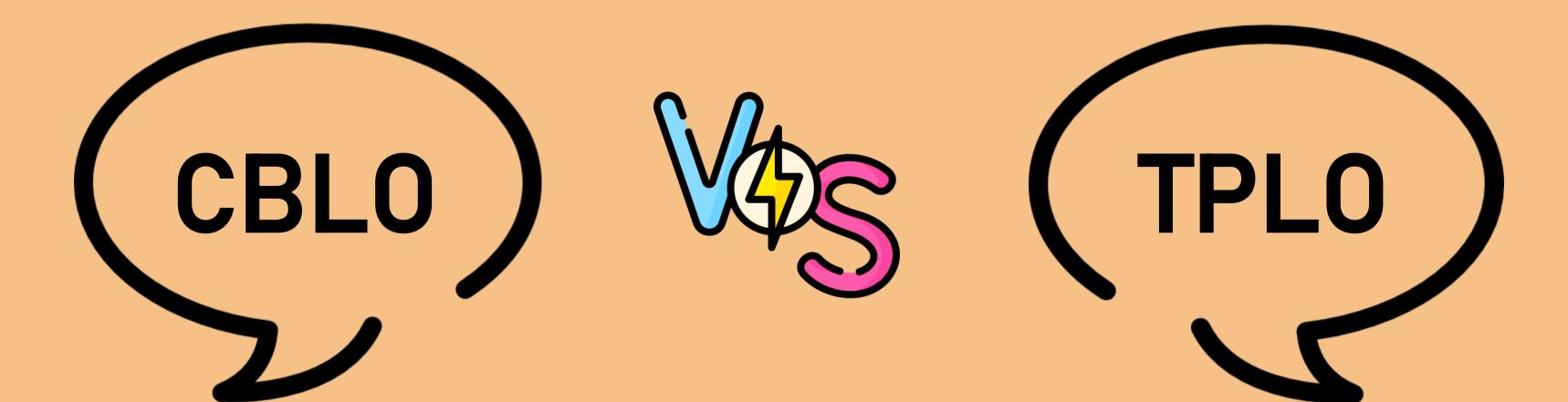




Figure 2. CORA-Based Leveling Osteotomy technique. Raske et al. 2013

Table 1. Comparative between CBLO and TPLO. Own elaboration

Complications	More frequent
Functionality	Complete
Affects CdCL*	Yes
<b>Compression forces</b>	Intraarticular
Pain/lameness	Yes
Alignment	No
Age	Skeletally mature
	Functionality Affects CdCL* Compression forces Pain/lameness Alignment

## CONCLUSIONS

 It is better to perform surgical treatment rather than conservative.
 CBLO can be done in any breed and at any age while TPLO can not.
 There is a shortage in the studies of CBLO and plus in comparative studies with TPLO.

\*Caudal cruciate ligament