

EQUINE TOMOSYNTHESIS

Carpus & Navicular (L0038, 19 Jun 2020)

Stallion, five years old, jumping discipline.

History: The horse had recurrent lameness of the left forelimb. Clinically manifested severe lameness while walking (degree 4 from 5), swelling in the subcarpal area at the palmarolateral side. After period of rest, lameness disappears and recur after some period of training.

The horse was brought to the clinic for diagnostic. During the clinical examination of horse, the lameness of the left forelimb was not observed. The X-ray and Tomosynthesis examination was performed.

There is roundish shaped osseous opacity area, approximately 6 mm in length and 3.2 mm in wide, at the distal region of the accessory carpal bone (Fig. 1, arrows).



Fig. 1. Lateromedial (a) and dorsopalmar (b) views Tomosynthesis slices and lateromedial (c) and dorsopalmar (d) views X-ray images of the left carpal joint.

The X-ray and Tomosynthesis views of navicular bone, showing an increased number of lucent zones along the distal border of the bone. These lucent zones are of a variety of shapes, and some positioned to the extreme edges of the bone (Fig. 2, arrows).



Fig. 2. Dorsoproximal-palmarodistal oblique (a) and lateromedial (b) views Tomosynthesis slices and dorsoproximalpalmarodistal oblique (c) and lateromedial (d) views X-ray images of the left forelimb.

Diagnosis: Bone fragment (chip) at the carpal joint region and navicular disease of the left forelimb.

Note: The clinical significance of these findings uncertain in relation to case history and need more clinical observation.