

► ANNEXE 2

VETERINARY EXAM OF CANDIDATE-SIRES METHODOLOGY

Warnings :

- (1) Any lack of identification conditions of the animal, the owner or the veterinary responsible of the realized exams will be the object of a refusal of the file from the members of the veterinary commission
- (2) Any lack of identification conditions of the demanded documents (digital pictures, ECG protocols, copy of endoscopy, X-Rays) will be the object of a refusal of the file from the members of the veterinary commission
- (3) Horses without microchip will not be allowed to take the veterinary exams

Part 1 : Identification, general exam, endoscopy upper airways

- **Identification of the horse** : verification of chipnumber and the graphic and written description in the passport of the horse. A copy of the horse passport will be added to the medical files.
- **General examination including** :
 - o Exam of the mouth (overjet/overbite) and the reproductive organs (cryptorchidy)
 - o Auscultation of lungs & heart (in case of abnormality: electrocardiogram / echocardio)
- **Endoscopy of the upper airways:**
Images to be stored on video or digital including the identification of the horse. The aim is to check for the grade of faryngeal hyperplasia and to detect possible asynchronism in laryngeal function (laryngeal hemiplegia). The grade list, proposed by the Havemeyer Foundation regarding "Recurrent Laryngeal Neuropathy" is applied:

Grade I : All arytenoid cartilage movements are synchronous and symmetrical. Full arytenoid cartilage abduction can be achieved and maintained.

Grade II : Arytenoid cartilage movements are asynchronous and/or larynx is asymmetrical at times, but full arytenoids cartilage abduction can be achieved and maintained.

Grade II-1: Transient asynchrony

Grade II-2 : There is asymmetry much of the time but there are occasions, typically after swallowing or nasal occlusion, when full symmetrical abduction is achieved and maintained.

Grade III : Arytenoid cartilage movements are asynchronous and/or asymmetric. Full arytenoids cartilage abduction cannot be achieved and maintained.

Grade III-1: there is asymmetry much of the time but there are occasions, typically after swallowing or nasal occlusion, when full symmetrical abduction is achieved, but not maintained.

Grade III-2 : Obvious arytenoids abductor deficit and arytenoids asymmetry. Full abduction is never achieved.

Grade III-3 : Marked, but not total arytenoids abductor deficit and asymmetry with little arytenoids movement. Full abduction is never achieved.

Grade IV : complete immobility of the arytenoid cartilage and vocal fold.

Part 2 : Clinical examination of the locomotor system

- Exam at rest (inspection and palpation)
- Exam in movement: the horse is presented at walk and trot on a straight line and on circle to the left and right both on both a deformable and firm surface. Flexion tests are optional.
- Other tests can be performed, pending the results of the clinical exam (e.g.: transcranial magnetic stimulation test for confirmation of myelopathy in case of symptoms of spinal ataxia).

Locomotor function is described or scored numerically according to the AAEP (American Association of Equine Practitioners) grading scale :

- grade 0 Lameness not perceptible under any circumstances
- grade I Lameness is difficult to observe and is not consistently apparent, regardless of circumstances (under saddle, circling, inclines, hard surface, etc)
- grade II Lameness is difficult to observe at a walk or when trotting in a straight line but consistently apparent under certain circumstances (weight-carrying, circling, inclines, hard surface, etc.)
- grade III Lameness is consistently observable at a trot under all circumstances.
- grade IV Lameness is obvious at a walk.
- grade V Lameness produces minimal weight bearing in motion and/or at rest or a complete inability to move.

Part 3 : Radiographic exam

X-rays and quality criteria of radiographic views for assessment of the osteoarticular status of SBS-candidate sires

Identification of radiographs

All radiographs should be labelled with:

- Name of the horse
- Family name of the owner
- Breed, sex and age of the horse
- Date of the radiographic examination

Right and *Left* limb should be clearly identified on radiographs with letters (R or D for right, L or G for left). Letters should not be superimposed to the radiographic image and should be positioned laterally on the DP view of the foot.

Radiographic views requested

Total : 20 views

Front feet : 6 views (LM and 2 "Oxspring" views (D60°Pr-PaD)

Front and hind fetlocks : 4 views (LM)

Hocks : 8 views (LM, P145°L-DM, D30°L-PIM, PID)

Stifle : 2 views (LM)

Front feet

- Lateromedial view
- DPr-PaDi ("Oxpring" or "upright pedal"): 2 views centred on the distal sesamoid bone but, if possible, oriented at slightly different proximo-distal angles to better highlight the distal border of the distal sesamoid bone (eg: D60°Pr-PaDi and D50°Pr-PaDi view)

Quality criteria

- No shoe should be present on the foot
- The sulci of the frog should be completely filled with a soft tissue opacity material
- Proximal interphalangeal joint should be included in both views
- Both views should be taken separately from fetlock views (centering should be on the foot)
- If possible, LM view should be taken on the weight bearing foot
- Medial and lateral condyle of P2 should be perfectly superimposed on the LM view (a distance of 2 mm between the medial and lateral condyle of P2 is tolerated)
- DPr-PaDi views should be exposed for the navicular bone, P3 should be visible

Front and hind fetlocks

- Lateromedial view

Quality criteria

- Medial and lateral side of the metacarpal/tarsal condyle should be perfectly or almost perfectly superimposed
- The dorsal profile of the sagittal ridge should be visible dorsal to the each condyle profile if the LM is not perfect
- Visualization of the palmar/plantar sesamoido-phalangeal space should be good. Oblique views will be taken if visualization is difficult and there is a doubt about the presence of a palmar/plantar fragment
- Proximal interphalangeal joint should be included in the LM view of the hind fetlock

Hocks

- Lateromedial view
- Plantaro45°lateral-dorsomedial oblique view
- Dorso30°lateral-plantaromedial oblique view
- Dorsoplantar view

Quality criteria

- The x-ray beam should be oriented to make the intertarsal and tarsometatarsal joint space perfectly visible on the LM view
- Lateral and medial ridges of the talus should be perfectly superimposed on the LM view (a distance of few mm between the 2 ridges is tolerated if the intertarsal and tarsometatarsal spaces are well visible)
- The proximal extremity of the metatarsus should be visible on the LM view of the hock
- The axial aspect of the medial malleolus and the intertarsal spaces should be clearly delineated on the D30°L-PIM oblique view

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Stifles

- Lateromedial view

Quality criteria

- The femoral condyles should be superimposed on the LM view (a distance of few mm to 1.5 cm between the 2 condyles is tolerated)
- The femoral trochlear ridges should be entirely visible on both views
- The cranial profile of the lateral trochlear ridge should not be superimposed to the outline of the trochlear groove
- Exposure of the LM view should be sufficient to perfectly detect any abnormality within the femoral condyles

For further information about radiographic examination :

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