Comments on the German Guidelines for the Radiological Evaluation of Horses at the Purchase Examination – Version 2007

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Abstract

These Radiology Guidelines have been applied to every purchase examination containing radiographs in Germany for many years now. They provide a tool to evaluate and to grade radiographical findings according to a standard protocol generally accepted in this country. This standard protocol’s second revision has now been published and it will continue to be adapted to new confirmed scientific findings in the future. The English version provides understanding of the German approach to foreign veterinarians involved in horse trade from and to Germany.

Introduction

The “Röntgenleitfaden“(Radiology-Guidelines) (Brunken et al. 2007b) and its addendum (Brunken et al. 2007a) have been the standard protocol to evaluate radiological findings in purchase examinations in Germany for many years (Dik et al. 1997; Hertsch 2003). The evaluation of radiological findings and the standard views recommended are the legal base for every horse trade containing radiographic examination in this country (Weinberger 2006). The purpose of an English translation is to provide better understanding of the German protocol to foreign vendors, purchasers and their veterinarians concerning horse trade from and to Germany.

The necessity to provide a standardised protocol was borne out of demands of the national legal system which is based on Roman law in contrast to the North American legal system for instance. Until 2002 horse trade was still regulated by the 1899 imperial ordinance. Vendor
and purchaser were seen to have equal knowledge. In reality the knowledge of the purchaser was decreased considerably due to changing demands of a horse as an athlete or leisure partner. The purpose of the purchase examination was to fill in this gap and to provide expertise to the purchaser (Schüle 2008). In 2002, livestock sale regulations changed fundamentally (Vollkommer 2003). According to German civil code animals are not items but they have to be traded as such (BGB 2002a). This involves a warranty up to two years with a burden-of-proof shifting after 6 months (BGB 2002b). In the past, the purchase examination mainly protected the purchaser concerning later emergence of issues. Today the purchaser is protected by law and the purchase examination has shifted to provide liability coverage to the vendor (Bemmann 2005; Plewa 2007). Through these legal changes the veterinarian assumes a higher risk regarding liability from the vendor (Münow 2006; Raum 2007). The Radiology Guidelines are a generally accepted tool to provide satisfaction of all these demands: the protection of the purchaser, the vendor and the veterinarian with regards to the German legal system. It provides a tool to grade radiographic findings in a commonly accepted way, which eases the evaluation by others. Findings and their evaluation in these guidelines may cause discussion but none the less they provide support for discussion.

The German nomenclature of radiological techniques differs greatly from the nomenclature generally used in the English speaking countries. The translation of technical terms in the Radiology Guidelines was left as close as possible to the German version. The techniques described therefore need to be explained and matched to the English nomenclature (Butler et al. 2000; Ross and Dyson 2003). It may be helpful to take notice of the sketches in the addendum.

The same relates to the nomenclature of anatomical structures. The formerly used nomenclature has been used again due to accuracy of translation (e.g. coffin joint instead of distal interphalangeal joint). In addition the chosen nomenclature is thought to facilitate
easier interaction between veterinarians from other nations and from Germany due to assumed intuitive use of the applied terms by German veterinarians.

**Radiological techniques concerning this protocol**

**Standard views**

**Oxspring 90°:** Dorsoproximal-palmarodistal oblique (DPr-PaDiO) survey view of the foot, centred on the navicular bone, one centimetre proximal to the coronary band. The tip of the toe is mounted on a 60° oxspring block at an elevation of 16 centimetres. The foot position is parallel to the contralateral limb (standard).

**Toe 90°:** Lateromedial (LM) survey view of the phalanges including the metacarpal/tarsophalangeal joint and proximal sesamoid bones.

**Tarsus:** Standard views of the tarsal joint including calcaneal bone, distal tibia and proximal metatarsal bone

- 0°: Dorsoplantar view (DPI)
- 45°-70°: Dorsolateral-plantaromedial oblique view (DL-PlMO)
- 90°-135°: Lateromedial (LM) – Plantarolateral-dorsomedial oblique (PlL-DMO) view
Advanced radiological examination

**Stifle** 90°-115°: Lateromedial (LM) view

0°/180°: Caudocranial (CaCr) – caudoproximal-craniodistal oblique (Cd 15°Pr-CrDiO) view

**Back:** Lateral views of the spinous processes of the withers, saddle position and caudal back.

Projections of radiographs in a left fore limb (Zeller et al. 1975). Graduation at the limb starts always at the dorsal / cranial aspect at 0° and proceeds laterally (counter clockwise on a left limb; clockwise direction on a right limb)
Literature


