



Common Disorders of Tarsal Joint in Horses Based on Pre-Purchase Radiographic Examinations: A Retrospective Study

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Received: 27 September 2023, Accepted: 29 November 2023

doi: [10.22059/jvr.2022.343447.3260](https://doi.org/10.22059/jvr.2022.343447.3260)

Abstract

BACKGROUND: Pre-purchase radiographic examinations of horses are very important for the diagnosis of possible disorders.

OBJECTIVES: This study aims to determine the variation and frequency of common disorders of the tarsus in pre-purchase radiographic examinations of horses and assess the effect of age, sex, and type of hind limb (right or left) on the occurrence of these disorders.

METHODS: In this study, we used the radiographs taken from the tarsal joints of the right and left hind limbs in 110 horses for a two-year period which were requested for pre-purchase radiographic examinations. Among these radiographs, the cases that included the standard position of the tarsal joint were evaluated for the existing disorders and the effect of age, sex, and type of involved hind limb.

RESULTS: The most frequent disorders were osteoarthritis (32.27 %), osteochondritis dissecans (5.91 %), and soft tissue swelling (1.36 %). The least common disorders were calcification, desmopathy, and tenosynovitis, each with a prevalence of 0.45%. Also, most of the tarsal joint disorders had a mild degree of severity (80 %). The prevalence of disorders was 100 % for horses aged <4 years (4 out of 4) and 49.1 % for horses aged >4 years (52 out of 106). No significant difference was observed in terms of gender ($P=0.65$) and type of involved hind limb ($P=0.17$).

CONCLUSIONS: Considering the prevalence of tarsal joint disorders in horses, pre-purchase radiographic examination can be very important for predicting the future health and performance of the horse. Therefore, radiographic evaluation of the tarsal joint should always be a part of pre-purchase examinations in horses.

Keywords: Horse, Pre-purchase, Radiography, Retrospective study, Tarsal joint

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Publisher: University of Tehran

Conflict of interest: The authors declared no conflict of interest.

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How to cite this article:

Soroori S, Masoudifard M, Deghghan M M, Tavakoli A, Mohammadi Joneydi N, Shateri Amiri B. Common Disorders of Tarsal Joint in Horses Based on Pre-Purchase Radiographic Examinations: A Retrospective Study. J Vet Res, 2024; 79(1): 17-28. doi: [10.22059/jvr.2022.343447.3260](https://doi.org/10.22059/jvr.2022.343447.3260)

Figure Legends and Table Captions

Table 1. Frequency of tarsal joint osteoarthritis in horses based on age, sex, and affected hind limb.

Table 2. Frequency of tarsal joint osteochondritis dissecans in horses based on age, sex, and affected hind limb.

Table 3. Frequency of tarsal joint soft tissue swelling in horses based on age, sex, and affected hind limb.

Table 4. Frequency of tarsal joint desmopathy in horses based on age, sex, and affected hind limb.

Table 5. Frequency of tarsal joint tenosynovitis in horses based on age, sex, and affected hind limb.

Table 6. Frequency of tarsal joint calcification in horses based on age, sex, and affected hind limb.

Figure 1. Radiograph of tarsal joint with osteoarthritis.

Figure 2. Radiograph of tarsal joint with osteochondritis dissecans.

Figure 3. Radiograph of tarsal joint with soft tissue swelling.

Figure 4. Radiograph of tarsal joint with chronic desmopathy.

Figure 5. Radiograph of tarsal joint with tenosynovitis.

Figure 6. Radiograph of tarsal joint with calcification.