

Ultrasonographic findings in the stifle joint of active jumping and dressage horses

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Introduction: Ultrasonography (US) is frequently used to evaluate the equine stifle joint. Some soft tissue US findings are known to be clinically relevant such as lesions affecting the echogenicity of the meniscus (*Peroni, Walmsley*), others are considered incidental such as hypoechoic areas in the patellar ligament (*Dyson*). These considerations are not always evidence-based and are sometimes the result of personal experience.

This study aims to describe the US changes observed in the stifle of clinically sound, active jumping and dressage horses.

Materials and Methods: To be selected, horses had to meet 4 criteria: (1) be competing at least 1 time/month at national or international level, (2) be in full work, (3) be free of lameness, (4) the riders should not have any complains on the horse's performances. Both stifle joints of each horse were scanned systematically and findings were recorded.

Results: 46 Warmblood horses (mean age = 9y) fulfilled the criteria (28 show jumpers, 18 dressage horses). US was normal in 21 horses. Abnormalities were seen in one stifle in 7 horses and in both stifles in 18 horses.

The medial femorotibial joint showed changes in 18 horses: periarticular new bone, effusion of medial recess, subchondral cyst in medial femoral condyle and lesions in the cranial meniscal ligament or medial collateral ligament. Four horses had abnormalities in the lateral femorotibial joint: mild effusion, subchondral cyst in lateral femoral condyle. The femoropatellar joint had abnormalities in 16 horses: medial patellar ligament, intermediate patellar ligament, effusion or osteochondrotic lesions.

Discussion: Mild changes can be seen in the stifles of sporthorses. Lesions in the menisci, the tendinous portions of the popliteus muscle, long digital extensor muscle or peroneus tertius muscle or the lateral collateral ligament are likely to be clinically important.

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