

Efficacy Test of Mixed Extracts of Panax notoginseng, Rehmanniae Radix, and Acanthopanax Cortex for the Treatment of Horses with Experimentally Induced Osteoarthritis

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Purpose: To assess the clinical, biochemical, and histologic effects of orally administered mixed extracts of Panax notoginseng, Rehmanniae Radix, and Acanthopanax Cortex (MEPRA) for the treatment with experimentally induced osteoarthritis in horses.

Materials and Methods: Osteoarthritis was induced in the left middle carpal joint of twelve horses by intra-articular injection of sodium monoiodoacetate (0.12 mg/kg). Test group (n=6) was treated with MEPRA which given orally once daily. Control group (n=6) received no treatment. Evaluations included clinical, gross, radiographic, synovial fluid, blood, and histologic examinations, as well as histochemical and biochemical analyses.

Results: Gross articular cartilage lesions were significantly decreased in test group, compared with control group (P<0.01). Test group was significantly improved in joint space width, staining, and biochemical contents of articular cartilage, compared with control group.

Conclusion: These results suggest that MEPRA is a viable therapeutic option for horses with osteoarthritis.

Key words: MEPRA, osteoarthritis, articular cartilage, horse