Veterinary Orthopedic Society

PODIUM ABSTRACT

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Intraarticular Treatment of Osteoarthritis with Polyglycan® assessed using an Equine Experimental Model

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Introduction

Polyglycan® is a patented formulation comprised of hyaluronic acid, chondroitin sulfate and N-acetyl-D-glucosamine and has been used clinically in horses intraarticularily for viscosupplementation to replace synovial fluid lost during surgery. This is the first randomized blinded placebo controlled study to assess Polyglycan® for the treatment of experimental osteoarthritis.

Materials and Methods

Osteoarthritis was induced arthroscopically in 1 middle carpal joint of 16 horses. Eight horses were treated with 125 mg of Amikacin IA (PCB) on study days 0 (after induction of OA), 7, 14 and 28. The remaining 8 horses were treated with IA Polyglycan® (PG) plus 125 mg of amikacin on the same study days.

Evaluations included clinical and radiographic, synovial fluid analysis, gross and histologic examinations as well as histochemical and biochemical analyses.

Results

No adverse treatment-related events were detected. The model induced a significant change in all parameters.

Intraarticular treatment of OA-affected joints with Polyglycan® resulted in beneficial effects on clinical pain, bone proliferation radiographically and degree of full thickness articular cartilage erosion seen grossly when compared to PCB treated OA affected joints.

Discussion/Conclusion

These findings support a symptom and disease modifying action of this Polyglycan® when administered at the time of disease induction.

Acknowledgements

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