

Comparison of Equine Synovial Sepsis Rate Following Intrasynovial Injection in Ambulatory vs. Hospital Settings

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Frequency of synovial sepsis was not different when comparing intrasynovial injections performed in the field versus in-hospital and with or without antibiotics. Authors' address: Colorado State University, 300 West Drake Road, Fort Collins, CO 80523; e-mail: lynn.pezzanite@colostate.edu. *Corresponding and presenting author. © 2021 AAEP.

1. Introduction

Frequency of synovial sepsis in horses following intrasynovial injection has been reported, but not compared with respect to environment in which the injection was performed. The objective of this study was to describe occurrence of synovial sepsis following intrasynovial injections performed in ambulatory versus hospital settings.

2. Materials and Methods

Records from Colorado State University were evaluated (2014-2018) and horses receiving intrasynovial injections identified. Patients presenting for septic synovial structures were excluded. Patient signalment, primary supervising service, medications injected, location (field/hospital), whether synovial sepsis resulted, and at what time sepsis was recognized were recorded. Logistic regression was used to estimate the contributions of covariates to the occurrence of synovial sepsis following injection.

3. Results

During the study period, 3866 intrasynovial injections were performed in 1112 horses during 1623 sessions (643/1623 sessions in the field). Performing injections in the field vs. hospital ($p=0.2$) or without antibiotics ($p=0.7$) did not alter risk of synovial sepsis. Most frequently used medications were hyaluronate (846/1623, 52.1%), triamcinolone acetonide (780/1623, 48.1%), and amikacin sulfate (684/1623, 42.1%). Four horses developed synovial sepsis (0.2% sessions, 0.1% synovial structures); 3/4 injected in the field, 2/4 received antibiotics concurrently. Frequency of septic synovitis was 10.4 cases per 10,000 injections, or 1 in 967 injections.

4. Discussion

These data may help to inform practitioners and clients regarding the relative potential risk of complications following intrasynovial medication in different environmental settings.

Research Abstract—for more information, contact the corresponding author

NOTES

Acknowledgments*Declaration of Ethics*

The Authors have adhered to the Principles of Veterinary Medical Ethics of the AVMA.

Conflict of Interest

The Authors have no conflicts of interest.