Incidence of Postoperative Sepsis in Equine Arthroscopy Without Antimicrobial Prophylaxis

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Antimicrobial prophylaxis may not be necessary for horses undergoing routine arthroscopic surgery. Authors' addresses: Hallands Djursjukhus, Björkgatan 19, 31168 Söinge, Sweden (Borg); Department of Large Animal Clinical Sciences, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK S7N 5B4 Canada (Carmalt); e-mail: carmalt_vet@hotmail.com. *Corresponding author; †Presenting author. © 2012 AAEP.

1. Introduction
Arthroscopy is the standard treatment methodology for intra-articular osteochondral “chip” fractures, for osteochondrosis, and as an adjunct modality during internal fixation. Despite this, there is no consensus on the need or use of antimicrobial prophylaxis. Complications and outcome of 444 elective arthroscopic surgeries performed over 3 years without antimicrobial prophylaxis are reported.

2. Materials and Methods
Computerized practice records were accessed, and the information from 444 consecutive elective arthroscopic surgeries between 2008 and 2010 were obtained. Age, sex, breed, joints explored, number of portals, anesthesia time, complications, and outcome were evaluated. Statistical analysis was performed and the level of significance set at $p < 0.05$.

3. Results
Six hundred thirty-six joints were explored. Nineteen horses had a total of 20 complications [fever (9), surgical site infection (3), cellulitis (1), bandage-associated wounds (2), limb swelling (1), medical colic (1), or septic joints (3)]. Horses with septic joints did not have any other complications. The incidence of sepsis was 0.5% for operated joints or 0.7% for horses. All horses survived and returned to function.

4. Discussion
The joint infection rate in our population compares favorably with previously published work citing a 0.9% incidence of sepsis in horses after arthroscopy in which perioperative antimicrobial therapy was administered. Currently, medical professionals are trying to reduce antimicrobial usage; as such, we would submit that most horses undergoing routine, elective arthroscopy do not require perioperative antimicrobial therapy.