Investigation Into the Use of Acupuncture for Ovulation Induction in the Normally Cycling Mare

Nora Huaman Chavarria, DVM, MVetSc*; Claire E. Card, DVM, PhD, Diplomate ACT; Dawne Nairn, DVM; Anne Marie De Leenheer, DVM; and Stephen T. Manning, DVM, MSc, Diplomate ACT

Acupuncture does not induce ovulation or affect reproductive hormone profiles in normally cycling mares. Authors’ address: Large Animal Clinical Sciences, Western College of Veterinary Medicine, University of Saskatchewan, 52 Campus Drive, Saskatoon, SK S7N 5B4 Canada; e-mail: nora.chavarria@usask.ca. *Corresponding and presenting author. © 2012 AAEP.

1. Introduction
Acupuncture has become very popular in veterinary medicine for reproductive disorders of all kinds. Evidence-based research regarding the efficacy of acupuncture therapy in equine reproduction is lacking. We undertook a clinical trial to critically evaluate the effect of acupuncture on ovulation induction and reproductive hormone profiles in normally cycling mares.

2. Materials and Methods
Thirty healthy mares were randomly assigned to three treatment groups: positive control (human chorionic gonadotropin [hCG], 2500 IU IV), negative control (saline, 2.5 mL IV), and acupuncture treatment (dry needle acupuncture at Bai Hui for 20 minutes and electro-acupuncture at Bladder (BL) 23 and BL 26 bilaterally for 15 minutes performed twice, 24 hours apart). Treatments were administered to mares in estrus with grade II or higher endometrial edema and a ≥35-mm follicle. Time from initiation of treatment to ovulation and circulating levels of estradiol, progesterone, and luteinizing hormone were assessed and compared among all three groups. Blinding was maintained throughout the trial.

3. Results
Time to ovulation was significantly decreased (P < 0.05) in positive controls (hCG) versus negative controls and the acupuncture group. No significant difference was detected between acupuncture- and saline-treated mares. Reproductive hormone profiles did not differ significantly between the groups.

4. Discussion
Under the conditions of this clinical trial, acupuncture does not affect time to ovulation or reproductive hormone profiles in normally cycling mares. Further research is warranted to investigate acupuncture treatment in equine reproductive therapy.