Intermittent hemospermia and pregnancy rate in a Quarter Horse stallion

Erin Patricia Cambier,a Mariana Diel de Amorim,a Claire Cardb

aAtlantic Veterinary College, University of Prince Edward Island, Charlottetown, PI, Canada; bWestern College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada

Hemospermia has been reported to be related to urethral rents, penile/urethral injury or infection, neoplasia, and granulomatous lesions, and experimentally has been reported to effect fertility. A 10-year old Quarter Horse stallion was referred for a lameness and fertility evaluation. Prior to referral his stifle had been injected with intra-articular steroids. Significant findings included left stifle osteoarthritis and a damaged meniscus. The stallion was maintained on stall rest and intermittent oral phenylbutazone. The stallion was administered (n=12) a combination of 400mg of imipramine IV and one hour later 150 mg xylazine IV for ex copula semen collection, and was collected using a breeding phantom and artificial vagina (AV) (n=20). Semen was collected in 2/12 ex copula attempts, and 19/20 attempts with an AV. The ex copula collected semen contained no red blood cells, but six of the stallion’s ejaculates collected with an AV contained a large amount of blood. Following hemospermic semen collections with an AV blood was seen in the urethral process. The stallion was sedated, urethroscopy was performed which revealed that the blood was associated with a fibrotic enlarged urethral process. The stallion was treated with trimethoprim sulfa orally at 30 mg/kg for one week. The semen was extended using INRA96 in a 1:1 ratio. Fifteen mares were bred with peri-ovulatory insemination(s) in 19 cycles. The first cycle pregnancy rate (PR) was 11/15 (73.3%), per cycle PR 12/19 (63%) and seasonal PR was 12/15 (80%). Six of twenty-one ejaculates were hemospermic; PR with and without hemospermia were similar.

Selected references