

and the plasma progesterone profile was greatest ($P < 0.05$) in the high-dose group. We concluded that OIF from seminal plasma had a dose-dependent effect on ovulation rate and CL form and function in llamas, and the effect was at physiologically relevant doses.

Keywords: Seminal plasma; Camelids; Ovulation-inducing factor; Ovulation; Semen

Reference

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INFLUENCE OF AGE, SEX, BREED ON THE OCCURRENCE OF RECTAL TEARS: 99 CASES (1985–2006)

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Equine rectal tears remain an important problem in veterinary practice. Although previous studies have characterized different treatments and outcomes following rectal perforation in the horse, there is relatively little information available concerning the associations of age, breed or sex on the occurrence of rectal perforation in the horse. Therefore, the objective of this retrospective study was to characterize the age, breed, sex and type of examination in horses presented for rectal tears to a referral hospital and compare these parameters with those of the general hospital population. For this study, medical records of 99 horses presented to the Veterinary Medical Teaching Hospital (VMTH) between April 1985 and August 2006 for rectal tears were reviewed. Age, breed, sex and type of examination were recorded for comparison with all of the equine inpatients presented during this interval. The Chi-square test of Homogeneity or Kruskal-Wallis Test was used to determine if age, sex or breed of the population with rectal tears differed from those of the overall equine inpatient population during this interval.

Horses with rectal tears included 42 Arabian Horses, 23 Quarter Horses, 13 Thoroughbreds, 4 American Paint Horses, 3 American Miniature Horses, 5 crossbreds and 9 ‘other’ breeds. There were 64 mares, 29 geldings and

only 6 stallions in the study population. Horses ranged from 6 months to 32 years of age. Median age at admission was 12 years. The majority of the rectal tears had been associated with colic examinations ($n = 44$) or reproductive examinations ($n = 35$). Eleven rectal tears had been associated with medical examinations ($n = 4$), dystocias ($n = 4$) and ‘others’ ($n = 3$); the remaining nine rectal tears were of unknown origin due to a lack of information in the data base.

Overall, the percentage of horses with a rectal tear represented 0.1% of all cases presented to the VMTH. Rectal tears were more common in older horses, with a greater frequency of rectal tears in horses >9 years of age ($P < 0.0001$). Mares and geldings represented the largest proportion of rectal tears; mares were more likely to have a rectal tear ($P < 0.0001$) than stallions or geldings. Although the total hospital population was mainly comprised of Thoroughbreds and Quarter Horses, rectal tears occurred proportionally more often in Arabian and American Miniature Horses ($P < 0.0001$). In conclusion, Arabian and American Miniature Horses were overrepresented in the population of horses presenting for rectal tears and horses >9 years of age had a greater occurrence of rectal tears.

Keywords: Rectal tears; Age; Sex; Breed; Horse

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USE OF BOVINE OOCYTES TO EVALUATE IN VITRO FERTILIZING CAPACITY OF EQUINE SPERM

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Inappropriate capacitation of sperm is likely one reason for poor success with equine IVF. We tested the suitability of bovine oocytes for evaluating fertilizing capacity of equine sperm by comparing: (1) gradient density versus swim up for sperm separation; (2) heparin concentrations; and (3) zona pellucida (ZP) intact and ZP-free oocytes. Percoll density gradient swim-up separation was used in four replicates with 2 and 10 $\mu\text{g/mL}$ of heparin in the fertilization medium and ZP-intact or ZP-free oocytes (2×2 factorial design). Bovine oocytes ($n = 280$) were aspirated from 2 to 8 mm follicles from abattoir-derived ovaries. Oocytes were matured for 23 h at 38.8 °C in 5% CO_2 in