SHORT COMMUNICATION

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PREVALENCE OF GENITAL TRACT PROBLEMS IN CLINICAL CASES OF VARIOUS SPECIES OF ANIMALS

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ABSTRACT

The prevalence of reproductive disorders in various animals including buffaloes, cattle, sheep , goats and mares was estimated from the record of Civil Veterinary Hospital , Jia Bagga, district Lahore for the period from January 2004 to December 2007. A total of 1216 cases of obstetrical problems, female reproductive tract infections, reported anoestrus, repeat breeding and vaginal bleeding were recorded. In buffalo prevalence of retention of foetal membranes (22.8%0), followed by vaginal/uterine prolapse (22.5%), anoestrus (19.9%), uterine infection (12.7%), dystochia (9.8%), torsion of the uterus (7.2%), abortion (3.3%), vaginal infection (1.1%) and repeat breeding (0.7%) was recorded. In cattle corresponding values were 30.6, 19.4, 12.9, 12.9, 11.3, 8.1, 3.2 and 1.6% respectively. In goats prevalence of45.8% was recorded for dystochia followed by abortions (23.0%), retention of foetal membranes (10.6%),uterine infection (9.3%), vaginal /uterine prolapse (3.6%), reported anoestrus (2.3%), vaginal infection (2.1%) ,vaginal bleeding (1.7%).In sheep corresponding values were 52.6,8.0,5.3,0.38,23.7,0.38,0.38 and 0.38% respectively. In mare highest prevalence (34.0%) was recordedfor reported anoestrus followed by abortions (31.8%), uterine infection (15.9%), vaginal infection (11.4%) and dystochia, retention of placenta, prolapse (1.43%).

Keywords: Reproductive problems, animals. Pakistan, Punjab.

INTRODUCTION

Reproductive disorders can lead to economic losses in terms of reduced fertility, low life time production, longer calving interval and increased expenses on medication in farm animals. (Samad *et al.*, 1987). The reproductive disorders ultimately can cause complete or partial reproductive failure (Chaudhry *et al.*, 1993).The reproductive disorders in the livestock could only be minimized when sufficient information regarding reproductive status of the animals is available (Dhanani *et al.*, 1987). The present paper is an attempt to record prevalence of various reproductive disorders in buffalo, cattle, sheep, goat and mare.

MATERIALS AND METHODS

Data are based on clinical record maintained in Civil Veterinary Hospital, Jia Bagga, Lahore, Punjab. A total of 1216 cases including buffaloes (308) , cattle (220), sheep (195), goats (350) and mares (143) with obstetrical problems, female reproductive tract infections, reported anoestrus, repeat breeding and vaginal bleeding brought during the period of 4 years (January, 2004 to December, 2007).The data collected were analyzed to compare the prevalence of reproductive problems in different categories of animals .

RESULTS AND DISCUSSION

The over all highest prevalence was found to be that of obstetrical problems (79.1 %), followed by non-specific reproductive tract infections (13.2%), reported anoestrus (8.3%), vaginal bleeding (1.6%) and repeat breeding (0.5%). The findings made by Barr (1995), however, showed that anestrous is a major cause of infertility while Kindhal *et al.,* (2002) reported dystochia as major problem in dairy animals. In the present study out of 79.1% of the obstetrical problems, dystochia alone contributed 35.4% followed by abortions 18.0 %, retention of foetal membranes 13.7 %, prolapse 8.5 % and uterine torsion 2.8%. Similar observations were made by Rice (1994) who also reported dystochia as one of the leading causes of calf mortality between birth and weaning in cattle. These observations showed that an understanding of the effects of parturition and dystochia on perinatal calf viability is paramount for the development of breeding and calving programmes. Mee, (2008) reported low dystochia rates in dairy cattle internationally (<5%), compared to higher rates of dystochia in the United States. The results of present study are also in accordance with Ginther (1992) who reported that incidence of retained placenta is lower than dystochia.

The incidence of retained placenta in dairy herds should not normally exceed 8% (Ahmed *et al*., 2006). In the present study repeat breeding was recorded in buffalo

cattle and was not observed in sheep, goat and mare. Vaginal bleeding was recorded in sheep and goat only. Ahmad *et al.,* (2007) reported major reproductive disorders in goats as abortion, retention of placenta and stillbirth. In the present study the number of cases of repeat breeding and vaginal bleeding were too small (7) to draw any result.

The results of present study showed that out of 35.4% dystochia cases highest prevalence was recorded in sheep (52.6%) followed by 45.8%in goats, 12.9% in cattle, 11.4% in mares and lowest in buffalo (9.8%). Highest prevalence of dystochia in sheep, goats and buffalo was seen in fall while in cattle the prevalence of dystochia was highest in summer and spring season. The results are in accordance with Sobiraj, (1994) who reported higher incidence of dystochia in sheep (39.3%) than in does (42.8%). Out of abortions (18.0%) the prevalence was highest in mares (31.8%), followed by 23.0% in goats, in cattle 8.1%, in sheep 8.0% while lowest in buffalo (3.3%). The highest prevalence was in fall months in goat, mare and cattle while in sheep the prevalence was highest in winter and in buffalo it was highest in summer. Out of total retention of foetal membranes cases (13.7%) highest prevalence was recorded in cattle 30.6% followed by buffaloes (22.8%), goats 10.6%, sheep 5.3%, mares 1.43%. The prevalence of retention of after births was seen in fall months in cattle, buffalo and mare but in sheep it was seen in winter and spring while in goats it was highest in spring and summer. Out of prolapse cases (8.5%) the prevalence was highest in buffalo 22.5%, followed by23.7%, in sheep, 11.3% in cattle, 3.6% in goats and lowest in mare (1.43%). The prevalence of prolapse was seen during fall in all species except goat in which the highest prevalence was in spring. Out of uterine torsion (2.8%) highest prevalence was highest in buffalo 7.2% in summer while in cattle it was 3.2% mostly in winter and spring. Out of total reported anoestrus (8.3%) the prevalence was highest in mares 34.0% followed by19.9% in buffaloes mostly in during fall months ,cattle 12.9%,goats 2.3% prevalence was seen in winter while lowest in sheep , 0.38% during fall. In buffaloes prevalence of was vaginal infection was1.1% and uterine infections was 12.7%. The prevalence of repeat breeding and uterine infection was nil in sheep while vaginal infections were 0.38%.Uterine infections were 19.4% in cattle while in mares it was 15.9%. In goat prevalence of vaginal infections was 2.1% and vaginal bleeding was 1.7%. Out of total repeat breeding cases (0.5%) prevalence in buffalo was 0.7% in fall and spring season while in cattle it was 1.6% mostly during summer.

Comparative prevalence of Reproductive Disorders: The different causes of dystochia were incomplete dilatation of the cervix, uterine inertia and abnormal foetal presentation, position and posture. Prevalence of dystochia correlates with calving and lambing seasons of the animals. Retention of foetal membrane was noticed in majority of cases in which abortion occurred in last trimester. Genital infections, uterine inertia, premature birth and managemental factors are believed to be the major predisposing causes of this problem. Awad and Ariri (1980) found that high birth weight and shorter intra-uterine life span of the foetus were associated with placental retention. Samad *et al.* (1980) observed the heavy weight of the buffalo foetus responsible for uterine atony which in turn, leads to the retained foetal membranes. The prevalence of pre-partum and post-partum vaginal/uterine prolapse among the obstetrical problems was 15%. The seasonal pattern of the occurrence of the genital prolapse varied in different animals which may be attributed to their tendency to breed seasonally. Samed *et al.,* (1987) also reported the similar observation. The prevalence of torsion of uterus was found to be the highest in buffalo (7.2% of the total cases) followed by cow (3.2% of the total cases) while less of ten in sheep and goat. Since uterine torsion occurs due to mismanagement, special attention should be given to the managemental practices for the animals in order to minimize the prevalence of uterine torsion. The clinical prevalence of genital infection and reported anoestrus are in line with the findings of Dhanani *et al.,* (1987). Most producers experience a herd problem with reproductive performance at some time. This may occur in the absence of any readily apparent change in management. When reproductive efficiency declines, the dairy producer should work with the herd veterinarian, artificial insemination (Al) technician, feed company representative, county extension agent and other resource people to troubleshoot the causes and determine solutions to the problem. When herd reproductive problems occur, they can have a major economic impact. Good records and a good working relationship with the herd veterinarian and other resource people minimize the chances of reproductive problems. If they do occur, use records, resource people and a systematic troubleshooting approach to solve those infertility problems.

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