Therapeutic efficacy of AV/UTL/17 in cases of post-partum gynaecological disorders in cows: a field study

Rajiv Walia[1], K.Ravikanth[2], Shivi Maini*[2] and Divesh Sood[2]

1. Veterinary Officer, Veterinary Hospital, Darang, Dist. Kangra (H.P.), India
2. R&D Team, Ayurvet Limited, Baddi, (H.P.), India
* Corresponding author

Abstract

Cross bred cows with the history of retained placenta (n=5), endometritis (n=5) and two of post-partum anestrus (n=2), were presented at Veterinary Hospital, Darang, (H.P.), India. The animals were treated with the polyherbal uterine tonic, restorative and ecbolic coded product AV/UTL/17. 83.33% recovery was recorded in this case study which reveals that the administration of herbal uterine tonic preparation is helpful in the treatment of reproductive disorders viz. retained placenta, post partum anestrus and endometritis in cows.

Keywords: Ecbolic, Endometritis, Herbal, Placenta, Uterine, Gynaecological Disorder, Anoestrus, Infertility.

Introduction

Post partum period is the most crucial transitory phase in bovine life when various physiological, gynaecological, biochemical changes occur. During this period the cattle is exposed to high risk of infection to uterus as the anatomical barriers are breached and genitilia remains open for various days (Goff and Horst, 1997). Post parturient retention of foetal membranes & gynaecological disorders like anestrus, endometritis, metritis, pyometra etc. causes severe economic loss. There is reduced milk production, delayed in involution of uterus and subsequent delayed conception, early embryonic mortality and the problems of repeat breeding or even permanent infertility (Narasimhan and Deopurkar, 1994). Retention of fetal membranes is one of the most common disease in post partum period in cattle. It can lead not only to persistence of putrefying tissue but also to increased incidence of metritis, decreased milk yield and poor fertility (Laven and Peters, 1996). Indiscriminate use of antibiotics for treatment of uterine infections has lead to emergence of resistance strains. As a result of this the attention is now moving towards the herbal formulations (Hemiaiswarya *et al.* 2008). AV/UTL/17 is a polyherbal formulation having potent medicinal herbal extracts that tone up uterus for better post partum reproductive efficiency. Looking at the above scenario, the present study was undertaken to explore the efficacy of polyherbal formulation AV/UTL/17 (*supplied by M/S Ayurvet Ltd., Baddi, India*) in the expulsion of retained placenta, treatment of endometritis and post partum anestrus in crossbred cows.

Material and Methods

The present study was based on efficacy evaluation of herbal uterine tonic and restorative coded product AV/UTL/17 in the treatment of cows presented in veterinary Hospital, Darang (H.P) with the history of various gynaecological disorders like retained placenta, endometritis and post partum anestrus. A total of 12 animals were presented in the hospital, out of which 5 were suffering from endometritis, 5 from retained placenta and 2 cases of post partum anestrus. All the animals were treated with Liq.AV/UTL/17@ 100ml/animal/day bid on first day followed by AV/UTL/17@50ml/animal/day twice daily for another 3-5 days. The various parameters recorded were nature of lochial discharge, cervical discharge, placental condition, time required for involution, signs of reproductive health and duration of estrus.

Results

Out of 5 cases treated for retained placenta 3 animals recovered fully with placenta expelled with in 6-8 hours after treatment, one case required supportive antibiotic therapy and one animal that was severely affected could not be recovered and died within 2 hours. The 5 cows suffering from endometritis and 2 from post-partum anestrus also exhibited signs of complete recovery after 3-5 days therapeutics with AV/UTL/17. The lochial and cervical discharge of the

treated animals were found to be normalized after treatment with AV/UTL/17. Out of 12 cows suffering from either retained placenta, endometritis or post-partum anestrus, 10 recovered fully revealing 83.3% efficacy of AV/UTL/17. These results might be attributed to the ecbolic activity of constituent herbs of the formulation.

Discussion

Manual removal is the oldest and commonest method of treatment, though not completely satisfactory. The use of collagenase may aid manual removal as it facilitates placental separation (Peters and Laven, 1996). One of the major preventive measures to check post-parturient reproductive failure is the care and follow-up of animals which had retention of placenta, abnormal discharge, post-partum anestrus or endometritis. As endometritis is a very common sequal to retained placenta, antibiotic and estrogens have been used to treat the condition but are not routinely effective or free from deleterious side effects. Various other treatments tried including ergot, oxytocin and oestrogen are not satisfactory (Arthur, 1979). Oral administration of herbs with proven ecbolic as well as uterine cleansing and restorative actions therefore, appears to be a safe and effective option both therapeutically and prophylactically. Exapar is a combination of such herbs with documented action profile e.g. *Aloe barbadensis* (Gupta 1972), *Aristolochia indica* (Chopra *et al*., 1982), *Gloriosa superba* (Tewari *et al.*, 1967), *Peganum harmala* (Kapoor, 1990), *Plumbago zeylanica* (Kapoor, 1990) and *Rubia cordifolia* (Nadkarni, 1954) which has also been used for treatment of reproductive disorders. Similarly, the new coded formulation AV/UTL/17, which is the combination of different herbs namely *Lepidium sativum, Citrullus colocynthis, Plumago zeylanica* & many more are also found to be efficacious in treatment of post partum gynaecological disorders in the present field study. The results of the present study are in agreement with the earlier reports on Exapar viz. validation of its efficacy as uterine cleansing agent in expulsion of membranes, restoration of lochial discharge and involution of uterus in bovines (Singal, 1996), and in improvement of reproduction efficiency in buffaloes when administered prophylactically (Khanna *et al.*, 1997). It is therefore, concluded that Exapar is an effective uterine cleanser and restorative, which benefits the post-parturient health and productivity of the animals.

Conclusion

Based on our findings it can be concluded that AV/UTL/17 may be recommended as a treatment for post partum retained placenta and for endometritis and as a co-therapy with parenteral antibiotics in severe cases.

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