



PROCEEDING

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STRATEGY TO MANAGE BIO-ECO-HEALTH SYSTEM FOR STABILIZING ANIMAL HEALTH & PRODUCTIVITY TO SUPPORT PUBLIC HEALTH



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THE HEALTH STATUS OF ETAWAH-CROSS(PE) NEONATES FOLLOWING ADMINISTRATION OF VARIOUS COLOSTRUM

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INTRODUCTION

For many reasons, a lot of ruminant neonates, have no free access to their mother's colostrums due to i.e. multiple births, maladapted maternal behaviour mostly at first parturition. These difficulties may be avoided by giving another alternative source of immunoglobulins for passive transfer and disease protection, such as bovine colostrum and colostrum products (White 1993). So far, there are no study has been reported on the use of bovine colostrum in Ettawah cross (PE) neonates and its role on their performance. The objective of this experiment is to study the health status of PE neonates following the consumption of various form of colostrum.

MATERIALS AND METHODS

Twenty four healthy PE neonates were used in this experiment, and were divided into four groups. Each group received fresh maternal (goat) colostrum, frozen-thawed bovine colostrums, bovine spray dried colostrums, and bovine powder commercial colostrums, respectively. Colostrum were given to the kids at amounts of 10% of body weight directly after kidding and followed by the same amount every 12 h, for three days. Total IgG in the colostrum given are as follows: 2.9, 5.2, 2.1, and 2.2 gr at the first meal, and 1.3, 3.2, 2.1, and 2.2 gr at the second meal, for kids fed fresh maternal, frozen thawed bovine, bovine spray dried, and commercial bovine colostrum, respectively. Kids were weighed at birth. The health status were examined at 0, 1, 3 days, and 1 week, included body temperature, frequency of respiration and frequency of pulse.

RESULTS AND DISCUSSION

The consumption of various colostrums i.e. fresh goat colostrums, bovine colostrums (frozen-thawed, spray dried and commercial colostrums) would increase the body temperature gradually, dynamic pulses, and decreased on respiration frequency. Results of this experiment was in accordance to Wereme *et al.* (2001), that the colostrum consumption may increase body temperature similar to the normal i.e. 38.8°C at the first 24 hours following parturition. The increase of body temperature has indicated that energy level through the administration of colostrum to the kids, relatively sufficient. The dynamics of the decrease on respiration rate in all treatment groups for 168 hours after birth, due to optimum inflation of lung. This related to sufficient energy input due to colostrum consumption.

CONCLUSION

The consumption of various colostrums may fulfill the energy sufficiency and optimum capacity of lung in term of respiration volume. Frozen-thawed bovine, bovine spray dried, and commercial bovine colostrums can be used as colostrum replacer.

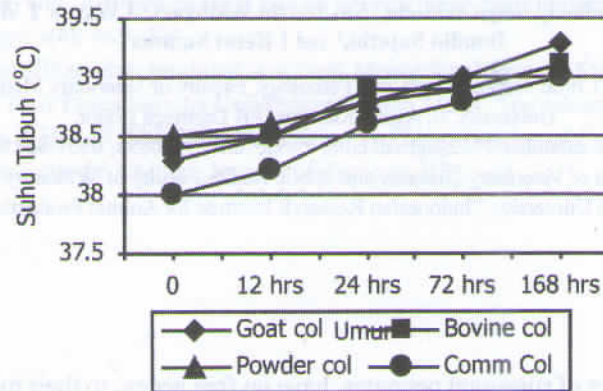


Figure 1. Body temperature of kids, 0-168 hours of ages

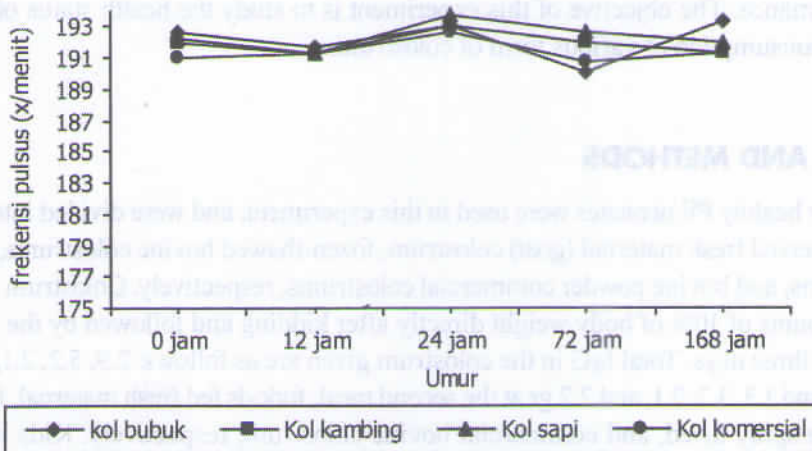


Figure 2. Pulse frequency of kids, 0-168hours of ages

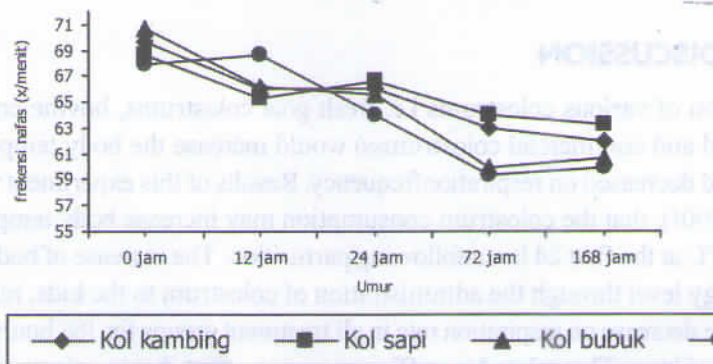


Figure 3. Respiration frequency of kids, 0-168 hours of ages



REFERENCES

- Wereme AND, Malgorzata S, Jean FG, Michel P. 2001. Immunoglobulin G absorption from pooled maternal colostrums, commercial powder and freeze-dried colostrums by newborn calves. *Anim. Res* 50: 315–323.
- White DG. 1993. Colostral supplementation in ruminants. *Compendium on Continuing Education for the Practicing Veterinarian* 15: 335–342.

CASE DESCRIPTION

A 12-month-old female patient presented with a 2-week history of intermittent, non-painful, non-pruritic, erythematous macules on the trunk and limbs. The lesions were initially thought to be allergic in origin but failed to respond to antihistamines and corticosteroids. The patient had no other clinical signs and was otherwise healthy.

On physical examination, the patient was found to have several erythematous macules on the trunk and limbs. The lesions were non-painful and non-pruritic. The patient had no other clinical signs and was otherwise healthy.



Figure 1

DISCUSSION

The patient presented with a 2-week history of intermittent, non-painful, non-pruritic, erythematous macules on the trunk and limbs. The lesions were initially thought to be allergic in origin but failed to respond to antihistamines and corticosteroids. The patient had no other clinical signs and was otherwise healthy.





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