Study on vulvar conformation in relation to fertility in Jeju horse

Jun-Bae Park, Min-Soo Kang[1], Tae Young Kang[*]

Department of Veterinary Medicine, Cheju National University, Cheju, 690-756, Korea
[1]Major of Animal Science and Biotechnology, Cheju National University,
Cheju, 690-756, Korea

Introduction: The normal conformation of the perineum in mare is very important because of preventing the ingress of air and bacteria into the genital tract. Defective vulval conformation can be developed vaginitis, cervicitis, and acute endometritis, resulting in subfertility. Caslick's index is pointed out the importance of this condition in relation to genital infection. Mare with Caslick's index > 150 is required Caslick's operation to reduce chance of pneumovagina and endometritis.

The objective of the present study were to investigate relationships between Caslick's index and fertility for different age groups of Jeju horse.

Materials and Methods: This study is based on information on 91 Jeju horses. Caslick's index was measured the effective length (l) and angle of declination (a) of the vulva in the mare. They were mated naturally by stallions from February to October during the years 2002-2005. The classification used in the present study was : Group 1 - good conception every years, Group 2 - conception every other year, and Group 3 - Barren.

Results: Younger aged group(2-7 years) had a lower Caslick's index(<50) compared with 8-14 aged group and older aged group(> 15 years). But there was no significant difference between fertility and Caslick's index by groups. No significant difference in fertility may be due to endometritis that continued to exist or species genetic factors of Jeju horse.

Conclusion: In this study, Caslick's Index was increasing by increasing age of Jeju horse like Thoroughbred. However, there was no significant association between the different Caslick's index and fertility by groups. Further research is needed to determine relationship between different Caslick's index and endometritis.