ACUPUNCTURE TREATMENT IN PERSISTENT MATING INDUCED ENDOMETRITIS (PMIE) IN THE MARE

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Post mating induced endometritis (PMIE) is a major cause of subfertility in the mare. Transient inflammation is a normal physiological event after mating capable to remove excessive spermatozoa, seminal plasma and contaminants from the uterus before the embryo enters the uterus1. The presence of ultrasonographically visible uterine fluid more than 24 h later is thought to be evidence of uterine pathology. The treatment is generally aimed to remove the inflammatory fluid from the uterus: a single dose oxytocin injection associated with uterine lavage is recommended as to increase uterine contractions. Anyway, not always the treatment with ecbolics is able to increase fertility in mares and many practitioners are proposing different treatments for this pathology. Acupuncture has been used to treat reproductive disorders in human beings, horses, and production animals2, but no evidences show previous treatment for persistent mating endometritis in mares. Electro-acupuncture has also been used clinically to increase uterine contractility in mares with delayed uterine clearance3.

Thirty-seven mares, 4-19 years old, trotters, were referred to receive an artificial insemination with fresh semen. 59 estrous cycles were evaluated and ovulation was induced with 2500 UI hcg given when follicles were more than 30 mm diameter. Mares were inseminated 24-30 hours after hcg was given and checked with ultrasound examination 24 after insemination in order to evaluate the quantity and the characteristics of the uterine fluid that was produced. The mares presented ultrasonographic signs of PMIE and were divided into 3 groups of treatment (oxytocine (O): n= 25, placebo(P): n=13, acupuncture(A): n=21). O group was given 20 UI ev, P 10 ml saline solution; A mares were treated using a single dry needle acupuncture treatment in acupoints for uterine pathologies (Baihuanshu, Yao Baihui, Taixi) but were also treated in other points such as Guanyuan, Guanyuanshu, Geshu, Gongsun, Huangmen, Huiyang, Jingming, Mingmen, Neiguan, Pishu, Sanjiaoshu, Shenshu, Tai Yang, Zu Sanli in order to rebalance the organic energy of the individual. The results were obtained from the ultrasonographic revaluation of the mares 24 hours after treatment and from pregnancy rate at 15 days after breeding. The quantity of fluid was reduced in all group but O reduced the amount of uterine fluid more than P (p<0,01) and A more than O and P (p<0,01). Both the mares A and O showed an increased pregnancy rate (76,2 % and 20,0 % vs 15,4 %) but A showed a significant increase of the pregnancy rates compared with O (76,2 vs 20,0%). Treatment with acupuncture was able to reduce fluid in uterus and to increase pregnancy rates more than the other two groups (p<0.01).
REFERENCES

