

Close this window to return to IVIS
www.ivis.org

European Veterinary Conference Voorjaarsdagen

Amsterdam, Netherlands
24 - 26 April, 2008

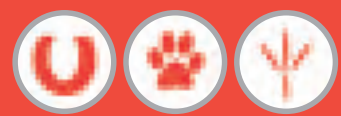


Next meeting :



www.voorjaarsdagen.org

Reprinted in IVIS with the permission of the Conference Organizers

**RELATIONSHIP OF VASOPRESSIN AND RENAL FUNCTION IN CANINE PYOMETRA**

WEI-YAU SHIA, WEI-MING LEE, DEPARTMENT OF VETERINARY MEDICINE, NATIONAL CHUNG-HSING UNIVERSITY 250-1, KUO KUANG ROAD, TAICHUNG, 402 TW, R.O.C., TONYSHA77@YAHOO.COM.TW

Pyometra is a common reproductive system disease associated with the estrus status in bitches. Dogs with pyometra have clinical signs such as renal dysfunction, polyuria and polydipsia^(1, 2). To realize the relationship between vasopressin (VP) and renal function, plasma vasopressin, urea nitrogen (BUN) and creatinine value were examined. In addition, bacterial isolation, identification and antibiotics susceptibility test were done. Our results showed that 50% (25/50) of pyometra dogs with azotemia, and 22% (11/50) of pyometra dogs had renal function disorder. VP secretion in pyometra dogs was not reduced, but the group with pyometra subsequent renal dysfunction had significantly higher VP concentration compared with control group ($p < 0.05$). Gram-negative species is the major causative agent in this study (81%, 46/57), *Escherichia coli* was the predominant bacteria (41%, 24/57). In antibiotic susceptibility test, pathogens showed highest resistance to sulfamethoxazole (100%) and lowest resistance to gentamicin (29%). Thus, maintenance renal function in bitch with pyometra is the most important thing.

Secondly, because of insufficient antidiuretic function, dogs with pyometra subsequent renal failure may have nephrogenic diabetes insipidus. In the end, in the therapy of dogs with pyometra needed further consideration while antibiotic using in the dogs with pyometra.

References

1. Heiene R, Kristiansen V, Teige J, Jansen JH. Renal histomorphology in dogs with pyometra and control dogs, and long term clinical outcome with respect to signs of kidney disease. *Acta Vet Scand* 2007; 49: published online.
2. Heiene R, van Vonderen IK, Moe L, Molmen GS, Larsen NH, Kooistra HS. Vasopressin secretion in response to osmotic stimulation and effects of desmopressin on urinary concentrating capacity in dogs with pyometra. *Am J Vet Res* 2004; 65: 404-8.