ULTRASONOGRAPHIC DIAGNOSIS OF CYSTIC ENDOMETRIAL HYPERPLASIA-PYOMETRA IN BITCHES

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ABSTRACT

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The use of transabdominal ultrasonography as a useful and reliable diagnostic method to diagnose Cystic endometrial hyperplasia in bitches is reported.

Key words: Ultrasonography, Cystic endometrial hyperplasia, Pyometra, Bitches

Cystic endometrial hyperplasia (CEH)—pyometra complex is the most frequently encountered endometrial disorder in bitches (Bigliardi *et al.*, 2004) and its exact pathogenesis is still unknown. CEH is considered by many authors to be an exaggerated response of the uterus to chronic progestational stimulation during the luteal phase of the estrous cycle, causing an abnormal accumulation of fluid within the endometrial glands and uterine lumen (De Bosschere et al. 2001). This paper describes the usefulness of ultrasonography as a means of diagnosing cystic endometrial hyperplasia-pyometra in bitches.

A total of 527 bitches of different breeds aged between 2-14 yrs referred to the small animal obstetrics and gynaecology referral unit of Madras Veterinary College Teaching Hospital for various reproductive disorders, were studied.

All the bitches were subjected to transabdominal ultrasound scanning (Aquilo® Pro,Esaote Piemedicals) by using 5 to 7.5 MHz sector probe. The uterus was examined to evaluate the integrity of the endometrium, presence of exudates and cystic hyperplasia of the endometrium.

Of the 527 dogs subjected to ultrasonography, 240 bitches were diagnosed positive for various uterine diseases of which the percentage incidence of pyometra, CEH, stump pyometra and uterine tumour was 85.42, 12.92, 1.25 and 0.41 respectively.

all the 31 cases of CEH, ultrasound examination was able to clearly identify the variations in uterine wall thickness, uterine distention due to fluid



Figure. Ultrasound of the uterine horn with endometrial hyperplasia. The endometrial surface shows numerous endometrial cysts. Uterine lumen contains anechoic fluid. Insert shows gross appearance of the endometrium after ovariohysterectomy.

REFERENCES

Bigliardi, E., Parmigiani, E., Cavirani, S., Luppi, A., Bonati, L. and Corradi, A.(2004). Ultrasonography and cyctic hyperplasi-pyometra complex in the bitch. Reprod. *Dom. Anim.*, **39**: 136-140.

De Bosschere, H., Ducatelle, R., Vermeirsch, H., Van Den Broeck, W., Coryn, M.(2001). Cystic endometrial hyperplasia-pyometra complex in the bitch: *Theriogenology*, **55**: 1509-1519.

De Cook, H., Ducatelle, R., Tilman, K., De Schepper, J.(2002). Possible role of insuling like growth factor—I in the pathogenesis of cystic endometrial hyperplasia pyometra complex in the bitch. *Theriogenology*, **57**: 2271-2287.

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- Hardy, R.M. and Osborne, C.A. (1994). Canine pyometra: pathophysiology, diagnosis and treatment of uterine and extra-uterine lesions. J.Am.Anim.Hosp.Ass., 10: 245-268.
- Kooistra, H.S., Okkens, A.C., Mol, J.A., Van Garderen, E., Kirpensteijn, J. and Runberk, A. (1997). Proceedings of the 3rd International symposium on canine and feline reproduction. *J. Reprod. Fertil.*, **51**(suppl.):355.

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