

UTERINE SEROSAL INCLUSION CYSTS COUPLED WITH PYOMETRA IN A BITCH

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ABSTRACT

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A case of uterine Serosal inclusion cyst coupled with pyometra and its successful management in a ten year old German shepherd bitch was described in this report.

INTRODUCTION

Serosal inclusion cysts are structures arises from mesothelial cells when they become trapped in the serosa due to rapid contraction of the involuting uterus during the post partum period (Mc. Entee, 1990). The high estrogen level during estrus cycle sometimes may also act as a causative factor by increasing contraction of uterus (Vural *et al.* 2004). Serosal inclusion cysts are either solitary or multifocal and incidentally found during Ovariohysterectomy in dogs (Schlafer and Gifford, 2008). These cysts do not have any effect on fertility but sometimes it may be associated with hormonal dysfunction (Schlafer and Miller, 2007). The present report describes about a rare case of uterine Serosal inclusion cysts coupled with pyometra in a German shepherd bitch.

CASE HISTORY AND OBSERVATION

A ten year old German shepherd bitch was presented to small animal critical care unit of Madras Veterinary College teaching hospital with the history of anorexia, vomition and slight pus discharge from vagina. Further anamnesis revealed that the bitch whelped before four months. Upon physical examination it was found that the temperature was 103°F, foul smelling pus discharge from vagina with all other vital parameters within physiological limit. Ultrasound examination revealed anechoic sacculations inside the uterus. Hematological examination showed Hb level 7.6 g/dl with a differential count of Neutrophils (mature) 85%, Neutrophils

(banded) 5%, Lymphocytes 8% and Eosinophils 2%. Serum biochemical examination revealed BUN 33.94mg/dl, Creatinine 0.63mg/ dl, protein 8.52g/dl and ALT (SGPT) 19 I.U/dl. The analysis of cystic fluid showed a value of Glucose 129mg/dl, total protein 0.27g/dl, AST (SGOT) 2 IU/dl, ALT (SGPT) 2.2 U/l, Ca 15.77mg/dl, P 9.63mg/dl, Na 165.2mmol/dl and K 5.29mmol/dl.

TREATMENT AND DISCUSSION

The bitch was treated with fluid and antibiotics for five days. Then again routine hematological and biochemical profile were performed and found to be within normal limits. On the next day Ovariohystrectomy (OHE) was performed under xylazine and ketamine anesthetic combination. Following standard operating procedure the uterus was removed along with ovaries. After the OHE, post operative care was taken for five days and the bitch recovered uneventfully.

The examination of the genital tract revealed presence of multiple serosal inclusion cysts on its surface. The cysts were distributed throughout the uterine horns and body which almost completely surrounds the ovary. The diameter of the cysts varied from 0.5-7 cm. All the cysts were thin walled and contained clear fluid (Fig-1). The examination of uterus revealed numerous sacculations and filled with thick pus like material. Careful exploration of ovary revealed presence of cyst measuring about 2 cm. on left ovary and right ovary was smooth. The fluid was collected from cyst and send for biochemical analysis.

Serosal inclusion cysts are found predominantly in aged Pleuriparous bitch and are usually focal rather than disseminated (Kennedy and Miller, 1993). In the present case the bitch was 10yrs old with focal cysts which fit the above description.

Serosal inclusion cysts are thought to be clinically benign and physiologically inactive without interfering the reproductive function (Godfrey and Silkstone,

1998). But Schlafer and Miller (2007) reported that the cyst formation may be associated with hormonal dysfunction. In the present report purulent vaginal discharge was observed along with pus accumulation in uterus which corroborates with the observations of Arnold *et al.* (1996). In conclusion uterine serosal cysts may not be always physiologically inactive and sometime it may be associated with pyometra.

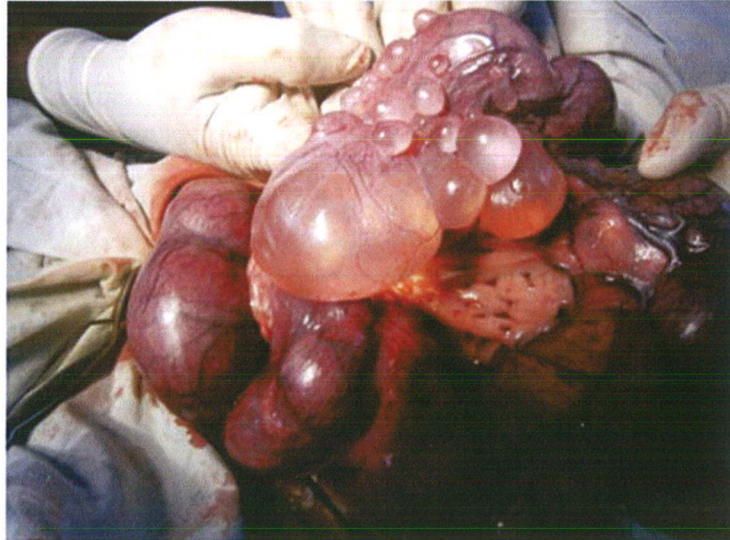


Fig 1. Serosal inclusion cyst on uterus

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