# **CLOSE PYOMETRA WITH BILATERAL FOLLICULAR CYST IN A BITCH**

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#### **ABSTRACT**

Five year old bitch having high temperature, pale mucous membranes, moderate dehydrate, distended abdomen, anorexia and vomition with marked leucocytosis, neutrophila, monocytosis, low heamoglobin, elevated blood urea nitrogen and distended uterus was confirmed as a case of close pyometra with bilateral follicular cyst in a bitch.

Keywords: Bitch, Close pyometra, Follicular cyst

## INTRODUCTION

About 19% bitches are diagnosed with pyometra before the age of 10 years (Jitpean *et al.*, 2014). Ovarian follicular cyst (single or multiple, unilateral or bilateral) is usually a condition of older bitch and are thin walled structures containing clear serous fluid (Robert, 1982). The present report describes a case of pyometra associated with bilateral follicular cyst in a bitch.

## CASE HISTORY AND OBSERVATIONS

A five year old primiparous non-descript bitch with pyrexia (103.8°F) was presented in Teaching Veterinary Clinical Complex with the history of anorexia since last 3 days, moderate dehydrate due to continuous vomition and without any signs of heat in recent past. The blood picture revealed marked leucocytosis (24,000/cmm), neutrophila (75%), monocytosis (6%), low haemoglobin (9.0 mg/dl), moderately elevated BUN (73.4 mg/dl; Normal range 10-30 mg/dl) and serum creatinine (2.0 mg/dl; Normal range 0.7-1.5 mg/dl). C-arm examination revealed distended uterus which was clearly indicative of pyometra and during ovariohysterectomy uterus is removed along with multiple cyst on ovary. Based on the clinical and laboratory findings the condition was diagnosed as

closed pyometra along with follicular cyst.

#### TREATMENT AND DISCUSSION

Bitch was treated with antibiotic, anti-inflammatory and multi-vitamins for 5 days along with fluid therapy (Ringer Lactate and Dextrose 5%). Thereafter, ovariohysterectomy was carried out in dorsal recumbency following premedication with Xylazine (2 mg/kg b wt, i.m.) and Butorphinol (0.02 mg/kg b wt, i.m.), and general anaesthesia inducted and maintained with Propofol (1 mg/kg b wt for 10 minute intervals). The distended uterine horns and uterine body was exteriorized and removed along with ovaries containing multiple cysts on both the ovary which found accidently during surgery (Figure 1). The cyst is tense and distended, give fluctuating fluid-filled feeling and when ruptured, the fluid inside the cyst is strawed coloured which is clearly indicative of Follicular cyst. Pathogenesis of follicular cystic disease in the dog ovary is unknown (Jayakumar et al., 2014). Postoperative care was carried out with antibiotic and analgesic for 5 days.

The observations revealed that bitch was suffering from close pyometra along with bilateral follicular cyst. The similar condition was reported in German Sphered dog having pyometra with ovarian and *par* ovarian cyst (Jain *et al.*, 2012). Others reported follicular cyst ovaries and Cystic Endometritis hyperplasia-pyomrtra

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68 Kumar *et al.* 



Figure 1: Close pyometra with follicular cyst (showing multiple cyst)

in Lhasa apso bitch (Jayakumar *et al.*, 2014). In close pyometra, toxins released following bacterial invasion lead to toxaemia affecting kidney function and its failure. The present case exhibited anaemia with marked leucocytosis and regenerative left shift. Monocytosis and neutrophilia are also reported as characteristic features of pyometra (Mahesh *et al.*, 2014). In a post mortem study, follicular cysts were found in 16% of 400 canine ovaries with more prevalence in nulliparous bitch and in bitch older than 5 years. Follicular cysts can be solitary (1-5 cm in diameter) or multiple (up to 10 cm in diameter). About 2% of bitch ovaries may reveal luteal cyst of 1.5-3.0 cm in diameter. These are usually thicker and more opaque than follicular cyst.

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