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## Therapeutic management of pyometra in a bitch

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### Abstract

Canine pyometra is a common pathological affection of intact bitches and it induces the high mortality in bitches if not treated. A bitch of breed German shepherd aged 5 years, weight 35 kg, with the body temp of 103<sup>0</sup>F, lethargy, depression, polydipsia, vomiting, mucopurulent vaginal discharge and malodorous was presented to Gynaecology Department of Bihar veterinary College Patna and on hematological examinations, leucocytosis & anaemia were seen, biochemical parameters were also increased likes Blood urea nitrogen (37.95 mg/dl), Alanine aminotransferase (127.68 IU/L) and total protein (8.01g/dl), whereas the blood glucose level was decreased (48.56 mg/dl). The bitch was treated with lower dose of Prostaglandin F2 alpha and antimicrobial along with some supportive therapy and successfully cured.

**Keywords:** Bitch, PGF<sub>2α</sub>, TP and pyometra

### 1. Introduction

Canine pyometra is a common pathological affection of intact bitches depicting pus in the uterus (Chastain *et al.*, 1999) [2]. There are two type of pyometra, closed and open. In open pyometra, cervix of the animal remains open while in closed pyometra the cervix is closed. The cases with close cervix pyometra are more toxic than those in which discharge is present i.e. open pyometra. In most of cases, the treatment of choice is ovariohysterectomy, but surgery is a radical form of treatment that prevents any further reproduction. In order to conserve the breeding capability of valuable females, medical treatment can be attempted which usually involved the repeated administration of prostaglandin Meyers-Wallen *et al.* (1986) [3]. Hence, keeping in views of the above mentioned facts the present case was treated.

### 2. Case History and Clinical Observations

A bitch of breed German shepherd aged 5 years, weight 35 kg, was presented to Gynecology department in the month of October' 2018 with the complains of anorexia, elevated body temperature of 103<sup>0</sup>F, lethargy, depression, polydipsia, vomiting, bloody vaginal discharge so called tomato soup color and malodorous. On hematological examinations, leucocytosis (25000 cell/ $\mu$ l) & decrease haemoglobin (7.5g/dl) were recorded while blood biochemical profile revealed elevated level of SGPT (127.68 IU/L), Blood Urea Nitrogen (37.95mg/dl) and total protein (8.01g/dl) and decreased blood glucose (48.56 mg/dl) level. So, the case was tentatively diagnosed as open pyometra case.

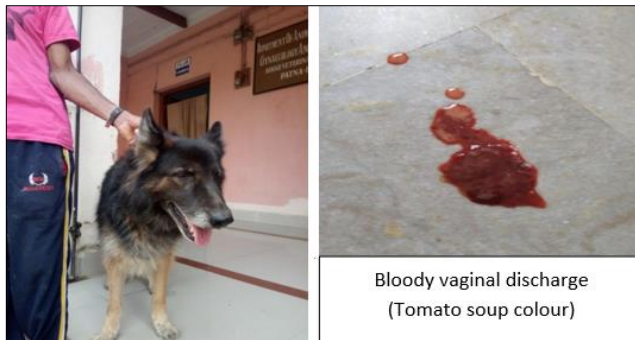
### 3. Treatment and Discussion

The bitch was treated with injection of Dinoprost Tromethamine (Lutalyse™ ,Pfizer Ltd., Mumai, India) @ of 100 $\mu$ g/ Kg body weight was given twice daily by subcutaneously for five days along with supportive therapy like injection Ceftiofur Sodium (Xyrofur™ Intas pharmaceutical co.) @ 2mg /Kg. body weight once daily for five days by subcutaneously route to eliminate the bacterial infection, inj. Metoclopramide (Perinorm, IPCA) @ 0.1mg/kg body weight was given twice daily by i/m route for three days to control over the vomiting and 2 ml of inj. B-Complex (Conciplex™ Concept Pharma Co.) was given once daily by i/m route for five days. Later after three days, the digestive syrup Vitazyme two teaspoon twice daily after meal was prescribed to induced appetite.

Seven days later the bitch was recovered successfully. Similar findings were reported by Sridevi *et al.* (2000) [5] who used dinoprost tromethamine for treatment of canine pyometra. There was found increasing in haemoglobin level indicated resolution of anemia on day 7. The TLC, hemoglobin and TP level were returned to near normal level. Present finding is in-agreement with Schepper *et al.* (1987) [4] who used natural PGF<sub>2α</sub> for the treatment of pyometra and observed normal serum biochemistry in all the treated bitches at completion of

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treatment. The cured bitch was conceived when mated in successive cycles. Basanti Jena *et al.* (2013) <sup>[1]</sup> are also in agreement for the using treatment protocol to conserve the breeding capability of bitches.



#### 4. Conclusion

The bitch was treated successfully by using natural PGF<sub>2</sub> $\alpha$  and antimicrobials along with supportive therapies. The medical treatment of pyometra can be attempted where the breeding capability of the animal is desired to be conserved. If treatment is not performed quickly, the toxic effect from the bacteria will be fatal.

#### 5. References

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