

PYOMETRA AFFECTED GERIATRIC BITCH STABILIZED BEFORE SURGICAL INTERVENTION

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A 11year old intact female Pomeranian dog was diagnosed as suffering from open cervix pyometra. Medical management of the disease with anti progesterone and misoprostol before performing ovariohysterectomy stabilized the dog and aided in a smooth recovery of the geriatric patient.

Keywords: Open Cervix Pyometra, Anti Progesterone, Ovariohysterectomy, Geriatric.

Canine pyometra is a common reproductive disorder of intact female dogs and incidence of pyometra in more than 8 years of age dogs is 17.59% (Sethi *et al.*, 2020^a). The incidence increases with age in the intact bitch and may approach 66 per cent in bitches over 9 years age. Pus accumulation reported within the uterine lumen, typically occurring during or intermediately following progesterone dominance (Soni *et al.*, 2018). Elevated progesterone levels helps to stimulate uterine gland secretions and create an excellent environment for bacteria that enter uterus from vagina. Pyometra is a disease of adult bitches with mean age of 11.2 years and vulvar discharge has been reported in 65 percent of bitches with pyometra. OHE is the treatment of choice for all cases of closed cervix pyometra, however open cervix pyometra may be managed safely with medical management. Success rates reported for OHE as a treatment for CEH pyometra are 83 per cent, deaths and long term complications attributed to septicemia in bitches with pyometra. Ovariohysterectomy in dogs with pyometra should be performed after stabilization of the bitch, if possible (Johnston *et al.*, 2001). Pyometra is a life threatening disease and the present case

reports a medically stabilized geriatric patient before conducting ovariohysterectomy.

Case history and Observations

A 11 year old parous Pomeranian bitch was presented to Veterinary Clinical Complex, Veterinary College, Proddatur with the history of anorexia, vomitions, dullness, pus like uterine discharges since last two weeks. History of mating was reported one month ago. Clinical examination revealed that animal was dull, depressed with elevated body temperature of 104.1°F and purulent discharges were seen from vagina. Abdominal palpation revealed an enlarged uterus with convoluted tubular horns and Ultrasonographic examination showed presence of large anechoic pocket anterior to urinary bladder (Fig.1). Complete blood picture revealed lowered Haemoglobin levels (8.3 mg/dl), decreased RBC count (3.63 millions/cmm), Neutropenia (14%), lymphocytosis (63%) with normal platelet count. The biochemical findings were, BUN 23.2 and creatinine 2.6 mg/dl. Basing on the clinical findings, abdominal and ultrasonographic findings the condition was diagnosed as open cervix pyometra.



Fig.1 A large anechoic pocket anterior to urinary bladder

Treatment

After taking into account of the clinical condition, complete blood picture findings, serum biochemical findings and age of the dog it was decided to stabilize the dog medically before surgical intervention. The animal was initially treated with Anti progesteron Mifeprstone @ 2.5 mg/kg bodyweight, BID for five days and Prostaglandin E2 analogue Misoprostol @ 3mg/Kg Bwt, BID from second day of initiation of treatment and continued for next four days. The treatment was supplemented with broad spectrum antibiotic and supportive therapy for seven days. On reexamination after one week the animal became active with

improved hematological, biochemical parameters and normal physiological findings, however pus discharge was observed. On ultrasonographic examination, decrease in size of pockets of pus was observed. The animal was presented for ovariohysterectomy next day. The surgery was performed under standard procedure to remove the uterus along with ovaries (Fig. 2). Antiseptic dressing of the surgical wound carried out along with broad spectrum antibiotics and supportive therapy with syrup B-Complex for 5 days. Suture removal was carried out after seven days post operatively. Animal recovered fruitfully without any complications.



Fig 2: Pyometra affected uterus removed surgically

Results and Discussion

The present case was a geriatric patient, dull and depressed, presented with vulvar discharges, neutropenia, indicative of endotoxemia with decreased RBC count and hemoglobin, so, it was decided to stabilize the condition of the aged dog before performing surgery. Animal was medically treated with progesterone receptor blocker which was most effective treatment without side effects even in geriatric patients for canine pyometra as also reported by Jyothi and Bharathi, 2015 and followed by PGE2 analogue as also mentioned by Sethi *et al.*, 2020^b). Anti progestins competitively bind p4 receptors potentially allowing increased myometrial contractility and cervix relaxation to evacuate the uterus. The medical management of canine pyometra is successful in early stages and OHE is the choice of treatment in late phases of pyometra as also stated by Soni *et al.* , 2018. Although the surgical management is choice of treatment in late phases of pyometra it is followed by many complications like peritonitis, cellulitis, suture dehiscence. Even though the present case was in late phase, after the medical management the bitch became active with reduced pus pockets in uterus and ovarohysterectomy was performed successfully to remove the enlarged uterus. A good post operative care was undertaken under the professional guidance and no complications were observed in present case.

Conclusions

Medical management of pyometra especially in geriatric bitches if possible, helps in better recovery, stabilizes the patient and leads to good prognosis to the surgical management.

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