Case Study: Pyometra (open) in Bengal Tigress Yuvraj R. Kaginkar

Pyometra, is a secondary to cystic endometrial hyperplasia, develops when bacterial invasion of the abnormal endometrium leads to intraluminal accumulation of purulent exudates.

Pathophysiology

Repeated exposure of the indometrium to high concentrations of estrogen followed by high concentrations of progesterone without pregnancy, leads to cystic endometrial hyperplasia. Uterine secretions provide excellent media for bacterial growth, ascending from the vagina through the partially open cervix during proestrus and estrus.

Systems Affected

Reproductive, renal, lymphatic, immune system, hepatobiliary.

Physical Examination

Sanguinous to mucopurulent vaginal discharge with blood.

Depression, anorexic.

Polyuria.

Vomiting.

Slight Dehydration.

Treatment

Intra Muscular injections: (once daily)
Amoxycillin Na & Sulbactam Na 2.5gm i/m 10 days
Liver extract 5ml i/m 5 days
Adrenochrome monosemicarbazone 10mg i/m First
2 days

PGF₃? 0.2mg/kg of BW First 2 days

P/o:

Electoral powder 5 days Liver extract 20ml 10 days

Vit A; D3; E; B12; 20 ml 5 days

Precaution

Side effects of PGF_2 ? referable to contraction of smooth muscles, hypersalivation, emesis, defecation, intense grooming of the flanks & vulva, appears within minutes of injection and subside within 1-2hrs.

Surgical Consideration

As it is the chronic progressive disease, ovariohysterectomy is preferred.

Discussion

- Ovariohysterectomy is the preferred treatment. - Recommend medical treatment only for valuable breeding animals, non progestational, estrus suppressing drugs must be given for life. -Medical treatment probably does not cure underlying cystic endometrial hyperplasia in animal with either open or closed cervix pyometra but may enable some affected animal to reproduce. - Condition in the

animals—cystic endometrial hyperplasia still exists, predisposed to recurrence, it's better to breed animal in a timely manner, recommend ovariohysterectomy as soon as breeding life is over.

- Antibiotics is not efficacious as sole treatment unless the uterus is of normal size and the serum progesterone is <2ng/ml.
- Animal with underlying endometrial hyperplasia has limited breeding life.

Prevention

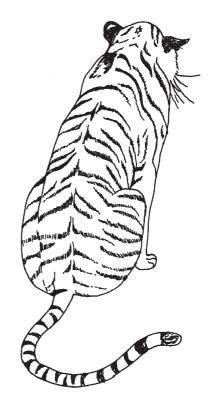
During the next proestrus it is advice to do the bacterial culture from anterior vagina, if not possible treat the animal with an appropriate antibiotics for 2-3 weeks.

References:

Hardy, R.M., Osborne, C.A. (1974). Canine pyometra: pathophysiology, diagnosis and treatment of uterine and extra uterine lesions. *J Am Anim Hosp Assoc*,10: 245–268.

Acknowledgement:

I am thankful to Officials of Andhra Pradesh, Forest Department, Mr. Parthasarathi, Incharge Curator (S.V. Zoological Park), Dr. TH Thoibasingh, Vet Asst Surgeon, for their encouragement and generous support.



Veterinary-Cum-Extension Officer, S. V. Zool Park, Tirupati, AP, yuvraj_kaginkar@yahoo.com