



PARALYTIC ILEUS ASSOCIATED WITH PYOMETRA IN A FEMALE DOG

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Ileus, or intestinal dysmotility is a transient and usually reversible condition. The etiology includes wide variety of causes such as after abdominal surgery, peritonitis, inflammatory bowel disease, pancreatitis, shock, septicaemia, electrolyte imbalance, metabolic acidosis, uremia, spinal cord trauma, opioids, phenothiazine tranquilizers, ganglionic blocking agents, antihistamines, thrombophlebitis, arteritis, disseminated intravascular coagulation (Bauer and Boecksaens, 2004). This paper describes a case of paralytic ileus secondary to pyometra in a German Shepherd dog.

A six year old mixed breed German shepherd dog was presented with the complaint of vomiting since one month, emaciation and anorexia. Physical examination revealed pale mucous membranes and normal temperature. Intestinal loops were distended and could be observed from outside itself (Fig. 1). Purulent vaginal discharge was present. The animal was not crossed till date and last heat occurred one month back.

Haematological examination revealed anemia (Total RBC - 3.40 mill/cmm, haemoglobin - 7gm% and PCV - 20.1%) and mild neutrophilia (75%). Serum biochemical examination revealed hypoalbuminemia (0.60gm%), slightly elevated ALP (279 IU/L) and ALT (90 IU/L). The blood gas analysis of venous blood revealed slight elevation of pH.

Ultrasonography of abdomen revealed that the intestinal loops were filled with gas, having no peristaltic movement and ascitic fluid was present with fibrin strands in the peritoneal cavity (Fig. 2). The uterus had hypoechoic areas indicating the presence of pyometra (Fig 3.). The abdominal radiography revealed distended gas filled intestinal loops

with no obstructing structures. The case was diagnosed as functional ileus secondary to pyometra. The treatment was started with antibiotic injections of Ceftriaxone tazobactam combination @ 20 mg/kg I.V., metronidazole @ 25 mg/kg I.V., Ringer lactate injection, dextrose injection (5%) for seven days, silymarin and protein supplement for one month. The case completely recovered within two weeks of treatment (Fig. 4).

Paralytic ileus or functional ileus or adynamic ileus due to failure of peristalsis and dynamic ileus or mechanical ileus due to mechanical obstruction are the two major types of ileus. The abdominal radiography and ultrasonography findings of the present



Fig. 1. Dilated intestinal loops



Fig. 2. Review after treatment



Fig. 3. Abdominal ultrasonography showing dilated intestinal loops with gas



Fig. 4. Uterus with hypoechoic areas

case ruled out the possibility of dynamic ileus. Radostits *et al.*, (2007) reported the occurrence of ileus secondary to endotoxemia. The endotoxemia and bacteremia due to pyometra observed in the present case might have contributed the development of arteritis and ischemia. Ellison (2013) reported arteritis and ischemia as the causes for ileus in dogs. The elevated hepatic enzyme values and hypoproteinemia might be due to hepatitis developed secondary to endotoxemia. Guilford *et al.*, (1996) opined that successful treatment of ileus involved correction of underlying abdominal and systemic diseases with promotility drugs.

Summary

Paralytic ileus secondary to pyometra in a German shepherd dog and its successful treatment is presented.

References

- Bauer, A.J. and Boeckxstaens, G.E 2004. Mechanisms of postoperative ileus. *Neurogastroenteol. Motil.* **16**: 54-60
- Ellison, G.W. 2013 Ileus. In *Mechanisms of Disease in Small Animal Surgery*. Teton New Media, USA. pp 56-58.
- Guilford, W.G., Center S.A. and Strombeck, D.R. 1996. Adynamic ileus In: *Strombeck's Small Animal Gastroenterology*. The WB Saunders Co. Philadelphia. pp. 535-537.
- Radostits, O.M., Gay, C.C., Hinchcliff, K.W. and Constable, P.D. 2007. *Veterinary Medicine A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs and Goats*. W.B Saunders Company, Philadelphia. 56p. ■

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