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Evagination of fetal mass through serosal layer of uterus in a female dog

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Abstract

A nondescript stray female dog of around 3 years age was presented to the Veterinary Clinical Complex, College of Veterinary & Animal Science, SVPUAT, Meerut for elective Ovariohysterectomy. Ultrasonography was performed as routine procedure which revealed a hyper-echoic structure (outside the uterine lumen, floating in the abdominal cavity) attached to the serosal layer of uterus. Laparotomy was performed under general anaesthesia followed by ovariohysterectomy. Hyperechoic structure, adhered to the serosal surface of the uterus was also excised off. Further exploration of the hyperechoic structure revealed it to be a bony mass of fetal origin (ectopic pregnancy). Animal was given post-operative therapy in the form of fluids, antibiotic, anti-inflammatory, hepatobiliary drugs along with antiseptic dressing for seven days. Suture removal was performed on the 10th day post surgery. Female dog recovered uneventfully.

Keywords: female dog, ectopic pregnancy, laparotomy, ovariohysterectomy

Introduction

Extrauterine/ Ectopic pregnancy is a condition where fetal development occurs at sites other than uterus i.e. abdominal cavity or peritoneal cavity or fallopian tube. In cases of true/ primary ectopic pregnancy embryo obtains nutrition from sites other than endometrium while in false or secondary extrauterine pregnancy embryo obtains nutrition from endometrium. In another classification ectopic pregnancy may be either tubal (in oviduct) or abdominal (Corpa, 2006) [1]. Incidences of ectopic pregnancy are higher among humans (Van Den Eeden S.K. *et al.* 2005) [6] and are reported to be very low in dogs (Corpa *et al.* 2006) [1]. In the present case report a female dog with ectopic pregnancy was operated for removal of fetal bones followed by ovariohysterectomy.

Case history and clinical findings

A nondescript stray female dog of around 3 years age and 15 Kg body weight was presented to Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Sardar VallabhBhai Patel University of Agriculture & Technology, Meerut for elective ovario-hysterectomy. All clinical and haemato-biochemical parameters were normal and animal was alert and active. Routine ultrasonography was performed to rule out pregnancy which revealed a hyperechoic structure attached to uterus floating in the abdominal cavity.

Materials and Methods

The female dog was anaesthetized with Inj. Xylazine @ 1mg/ kg body weight followed by Inj ketamine @ 8 mg/kg body weight. The ovario-hysterectomy was performed following standard operating procedure. The hard mass was also excised off. On further exploration this hard mass was confirmed to be a bony mass of fetal origin (Fig. 1).

Discussion

Ectopic pregnancy is rare phenomenon in animals, where pregnancy may either be tubal (implantation occurring within the oviduct) or abdominal (conceptus resides within the abdominal cavity) (Van Den Eeden S.K. *et al.*, 2005; Copra, 2006) [6, 1]. In dogs tubal pregnancies are not common (Copra, 2006) [1]. The present case was of abdominal ectopic pregnancy where in majority of reports that the trauma causes rupture of uterus and leads to escape of conceptus from uterus to abdominal cavity (Kuhlman and Kovan, 1956; Peck and

Badame, 1967; Nicholl, 1979; Ranganath *et al.*, 1995; Shamir and Shahar, 1996; Makek *et al.*, 1999; Shino *et al.*, 2005) [3, 7, 8, 9, 4, 10, 5].

Several clinical signs like pyrexia, dyspnoea, inappetance, anorexia, dullness and depression might be seen during presentation of such cases at clinics but in the present report female dog didn't reveal any clinical signs as have been reported previously too (Philip, 2012) [12]. Due to lack of any clinical symptoms abdominal drain was not performed and following surgical excision post operative therapy was performed for seven days to avoid postoperative sepsis.

To perform differential diagnosis of present case with abdominal mass further exploration of ectopic mass was done where presence of bones confirmed the mass to be of fetal origin. There are scanty reports on prognosis of cases of ectopic pregnancy in canines (Kuhlman and Kovan, 1956; Desai and Tiwari 2009) [3, 11] but the present case was without any clinical signs so it could easily be managed with surgical intervention only.



Fig. 1 Bony mass of fetal origin (ectopic pregnancy)

Conclusion

Ectopic pregnancy is a rare condition in female dogs. The present case was operated to excise off bony mass of fetal origin (ectopic pregnancy). Ovariohysterectomy was also performed after removal of the fetal mass which resulted in uneventful recovery of the female dog.

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