

## ECTOPIC PREGNANCY IN A MALABARI DOE

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### ABSTRACT

A Malabari doe with overdue pregnancy was presented with no typical evidence of kidding. On abdominal palpation, a firm mass was palpated which was tentatively diagnosed as ectopic pregnancy, and was further confirmed by trans-abdominal sonography. The ectopic fetus was removed by laparotomy. The presence of mesenteric vegetative attachments of placenta and completely involuted uterus without any uterine scar signified the occurrence of ectopic pregnancy at an early stage.

**Keywords:** Doe, Ectopic, Extrauterine, Laparotomy, Pregnancy

### INTRODUCTION

Ectopic or extrauterine pregnancy, a pathological condition, could be localized as tubal or abdominal. The former is most common ectopic pregnancy in humans with rare occurrence in domestic animals (Mitchell, 1989). The abdominal ectopic pregnancies are categorized as primary that occur as a result of implantation of a fertilized egg on the peritoneal / omental surface or secondary in which fetus enters the abdominal cavity due to rupture of uterine wall (Corpa, 2006). This report describes an overdue pregnancy in a Malabari doe owing to secondary abdominal ectopic pregnancy.

### CASE HISTORY AND OBSERVATIONS

A Malabari doe (age 6 yr) with the history of natural breeding more than five month back was presented due to the absence of signs of kidding like no pelvic relaxation and no evidence of vulval edema or vaginal discharge. However, the feed and water intake was normal. On abdominal palpation, fetal skeleton was appreciated, but fetal ballottement was unsuccessful. The per-vaginal speculum examination revealed closed cervix and no evidence of discharge. Trans-abdominal ultrasound examination revealed

a heterogenous and hyperechoic fetal skeleton with acoustic shadowing and the absence of anechoic fetal fluid, uterine contour or vascular response. The absence of fetal fluids and the presence of a non-viable fetus in the close proximity of uterine confinements on trans-abdominal ultrasound signified the condition as ectopic pregnancy. In addition, there was no history of fall or accident.

### TREATMENT AND DISCUSSION

An oblique flank laparotomy was performed under general anesthesia (xylazine and diazepam) followed by local infiltration anesthesia (2% lignocaine). Following routine surgical preparation, the abdominal exploration revealed a sterile, full-grown dead fetus, therefore, careful dissection was performed to remove the adhesions to the fetus.

The vegetative attachments of fetal membranes with mesentery were noticed and direct blood vessels supplying the fetus were absent (Figure 1). Moreover, the uterus appeared grossly normal, completely involuted and without scar in any of the horns (Figure 1). Also, the ovaries were grossly normal with follicles present and luteal structures absent. The abdominal cavity was flushed several times with saline and laparotomy incision was closed under standard techniques. The doe recovered uneventfully with normal vitality. On the

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**Figure 1: Ectopic pregnancy with adhesions (left), vegetative placental attachments with mesentery (middle) and involuted uterus without scar (Right)**

basis of clinical, sonographic and laparotomy findings, a confirmative diagnosis of secondary abdominal ectopic pregnancy was made. In addition, the absence of scar on the uterus, a completely involuted uterus and the presence of follicular structures on the ovary indicated the occurrence of ectopic pregnancy at an early stage.

A true ectopic pregnancy can only occur in primates due to the type of placentation that favors its development, whereas in animals, the type of placentation makes it difficult for the development of true ectopic pregnancy. However, secondary ectopic pregnancy was seen in domestic animals due to the rupture of uterine wall caused by trauma or injury with subsequent development of fetus in peritoneal cavity (Osenko and Tarello, 2014). The death of fetus would occur when the crude placental attachment no longer provided sufficient nutrition through an inadequate blood supply (Buckley and Caine, 1979). The clinical signs of ectopic pregnancy are variable and sometimes include gastrointestinal tract disorders, abdominal distension and anorexia. These clinical signs are related with extraneous infections, mechanical disturbance of abdominal organs or necrosis of tissue

of ectopic fetus. In most cases, the affected animal will be apparently healthy and diagnosis is usually an incidental finding (Corpa, 2006).

In present report, the doe had a secondary abdominal pregnancy, probably from an accidental fall, though not accounted. In addition, the non-existence of any uterine scar and a completely involuted uterus validated the happening of ectopic pregnancy at an earlier date.

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