

## ECTOPIC PREGNANCY IN A GOAT –A CASE REPORT

Ram Niwas<sup>1\*</sup>, Seema<sup>2</sup> and Gaurav<sup>1</sup><sup>1</sup>Government Veterinary Polyclinic, Sirsa, India- 125055, <sup>2</sup>GVH Khasa Mahajan, Hisar

## SUMMARY

The present report describes successful management of an unusual case of primary form of abdominal ectopic pregnancy in a goat in which foetus was protruded out of abdomen after tearing muscles and skin that might be due to pressure exerted by foetus on abdominal wall. After stabilization of the goat, foetus was removed surgically and post-operatively antibiotic, analgesic, fluid therapy, liver tonics and antiseptic dressing were advised.

**Keywords:** Abdominal wall, Ectopic, Goat, Pregnancy, Primary form

Extrauterine or ectopic pregnancies have been described in humans and categorized thoroughly (Corpa, 2006) and denote a pregnancy occurring elsewhere than in the uterine cavity. In humans, it is a relatively common pathologic condition, and an incidence rate of 20.7 cases per 1000 pregnancies has been reported by Van Den Eeden *et al.* (2005). While it is considered rare in animals, detailed epidemiological studies have not been conducted (Corpa, 2006). Two types of ectopic pregnancies are mainly recognized: tubal pregnancy occurs when an oocyte is fertilized and then remains in the oviduct and abdominal pregnancy occurs when the gestation develops in the peritoneal cavity. The latter may be subdivided into two subtypes: the primary form, when a fertilized oocyte enters the peritoneal cavity and becomes attached to the mesentery or abdominal viscera, and the secondary form, which follows the rupture of an oviduct or the uterus after the fetus has been implanted, and the fetus is expelled into the peritoneal cavity. Secondary abdominal pregnancies were diagnosed in all cases except in some does, where a primary pregnancy was suspected (Segura *et al.* 2004).

A 3 years old goat was brought to Government Veterinary Polyclinic, Sirsa with the history of hanging hard mass with foul smell from last 9 days. History revealed that this hard mass appeared gradually from abdominal wall and dried subsequently. Clinical examination revealed a dead foetus which got dried off due to presence of hot environment (Fig. 1). Since goat was off feed, dull and depressed, it was decided to undertake surgical removal of the foetus immediately. The surgical site around foetus was prepared for aseptic surgery. Since goat was in shock, fluid therapy (normal saline solution) along with supportive therapy (ceftraixone, meloxicam and Vitamin B-complex) was given prior to surgery. Lignocaine hydrochloride (2%) was infiltrated in ring fashion in abdominal muscles of doe around foetus. Subsequently ruptured skin and muscles were further incised for easy manipulation and removal of foetus. After exploration of fetal mass, it was found that portion exposed to environment was dry while portion of foetus embedded in abdomen was foul smelling and found

attached with the mesentery of small intestine by means of well-organized fibrous surrounding of the foetus. It was exteriorized and separated carefully. The uterus and ovaries were without any abnormalities. Abdominal cavity was lavaged with normal saline solution and metronidazole solution. After proper debridement of muscles and skin, muscles were sutured with lock stitch pattern using chromic catgut and skin with simple interrupted pattern using braided silk. Post operatively antibiotic (Inj. Ceftraixone 1g I/M), analgesic (Inj. Meloxicam 4 ml I/M), fluid therapy (Inj. Normal saline 500 ml, Metronidazole 100 ml I/V), Vit. B complex (Inj. 2 ml I/M) and antiseptic dressing with povidone iodine was prescribed for 5 days.

Since the dead foetus was attached with mesentery of the small intestine and not having any contact with uterus, thus it was a typical case of primary form of abdominal ectopic pregnancy in goat. Primary abdominal pregnancy has been described associated with a variety of extra-pelvic organs, including omentum, liver, spleen, and the small and large intestines. It is known that the myometrium can regenerate, leaving little or no cicatricial tissue. This may explain the failure to find a uterine scar in some reports (Bunte and Hildebrandt, 1975). Ectopic pregnancies are rarely diagnosed in animals and the causes and mechanisms leading to an ectopic implantation of the ovum are not always clearly defined in humans and animals (DeCecco *et al.*, 1984). Except in spayed animals, all other recorded cases were thought to be due to an abnormal parturition associated with uterine rupture (De Nooy, 1979; Palmer, 1989), or with abnormal uterine anatomy i.e. one uterine horn and an urachus remnant (Hansen, 1974).

In most of the reported cases, including the present case, animals carrying extrauterine foetuses are apparently healthy and diagnosis of the ectopic pregnancy is usually an incidental finding (Myung *et al.*, 2016). Recently, Singhal *et al.* (2017) reported uterine rupture and ectopic pregnancy in a bitch. The scarcity of reports about this condition in commercial animals might be due to the absence of ordinary necropsy procedures (Corpa, 2006).

\*Corresponding author: drsundariwal@gmail.com



Fig.1: Ectopic pregnancy in a goat

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