### SECONDARY ABDOMINAL PREGNANCY IN A EWE

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#### **ABSTRACT**

A case of secondary abdominal pregnancy in ewe was reported. The dead fetus was removed surgically from the abdominal cavity. Uterine rupture was attributed to be the cause of the abdominal pregnancy.

## Key words: Sheep, Secondary abdominal pregnancy, uterine rupture

#### INTRODUCTION

Ectopic or extra uterine pregnancy denotes a pregnancy occurring anywhere other than the uterus. On reviewing the literature two forms of abdominal pregnancies have been reported (Corpa, 2004). In the primary form, the oocyte is directly lost from the oviduct, fertilized in abdomen and develops there or a fertilized ovum enters the peritoneal cavity get attached to the mesentery or abdominal viscera. Placentation must exist for the maintenance of primary form pregnancy. Secondary abdominal pregnancy follows the rupture of an oviduct or uterus after the fetus has been implanted (Smith et al., 1989). This can happen either due to external trauma or internal pressure (Owensby et al., 2001), which causes the fetus to escape into the abdominal cavity. Placental attachments are retained in a few cases (Lederer and Fisher 1960). In some cases, the fetus develops further and re-implantation of the placenta in the abdominal cavity (Bunte and Hildebrandt, 1975). An internal abortion may occur in which the conceptus escapes into the abdominal cavity along with a loss of placental attachment. (Madani and Tirgari, 1984). The present communication reports a case of secondary abdominal pregnancy in a ewe.

### CASE HISTORY AND OBSERVATION

An ewe with symptoms of difficult birth was presented for treatment at Disease control section of Sheep Breeding Research Station, Sandynallah. On vaginal examination the cervix was one finger dilated, part of the placenta was observed in vagina. No fetus or fetal parts were detected. On abdominal palpation, a fetus was palpated in the abdominal cavity of the ewe anterior to the pelvis close to the midline. Hence, uterine rupture or extra uterine fetus was suspected and a caesarean section was proposed to relieve the fetus. The

ewe was sedated with 0.4 mL of xylazine (Xylaxin – Indian Immunologicals) and lower left flank was prepared and infiltered with 15 mL of lignocaine (Xylocaine, Astra Zeneca Pharma). A horizontal lower flank incision was made; a fully grown, dead male fetus was noticed inside the abdomen. The uterus was involuted and had a reddened and thickened area measuring 3" x 1" near broad ligament attachment. This may be the area of rupture from which the fetus may have escaped few days before lambing. The abdominal wall was closed as per standard surgical procedure. The animal made an eventful recovery.

Investigation of the records revealed no history of lambing or caesarean section performed in this ewe previously. Several authors have reported extrauterine pregnancies in mares (Thursby-Pelham, 1992), cows (Hedge, 1989), does (Kumar et al., 2018) and in sheep (Davies, 1982; Madani and Tirgari, 1984; Mitchell, 1989; Brozos et al., 2013). Naikoo et al., (2017) have reported a case of primary ectopic pregnancy in ewe, where in, the fetus established connection with abdominal viscera at intestinal mesenteric area. Brozos et al., (2013) reported a rare case of ectopic pregnancy in sheep, occurred through a caesarean scar in the uterus along with presence of a normal fetus inside the uterus. Most of the cases of ectopic pregnancies reported in sheep were the result of uterine rupture. The present case belongs to the category of secondary abdominal pregnancy. The reddened and thickened area in the uterus could be the point of breach, which could have healed subsequently through the normal repair process. The fact that the wound was healed when the case was reported indicates the time delay and is suggestive of a case of secondary abdominal pregnancy. However due to improper location and no placental attachment the fetus was found dead.

# **REFERENCES**

Brozos, C., Karagiannis, I., Kiossis, E., Giadinis, N. D. and Boscos, C. (2013). Ectopic pregnancy through a caesarean scar in an ewe. *New Zealand Vet. J.* **61**: 373-375.

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- Bunte, R.M. and Hildebrandt, P.K. (1975). Abdominal mummified fetus in an owl monkey. *J. Am. Vet. Med. Asso.* **167**: 667-668.
- Corpa, J.M. (2006). Ectopic pregnancy in animals and humans. *Reproduction*. **131**:631-640.
- Davies, P. (1982). Extrauterine pregnancy in a ewe. *Vet. Rec.* **110**: 475.
- Hedge, D. (1989). Extrauterine fetal development. *J. Am. Vet. Med. Asso.* **194**: 1522.
- Kumar, R. N., Jayakumar, C., Shravya, G. and Sudha, C. (2018). Ectopic pregnancy in a Malabari doe. *Indian J. Anim. Reprod.* 39: 66-67.
- Lederer, H.A. and Fisher, L.E. (1960). Ectopic pregnancy in a dog. *J. Am. Vet. Med. Asso.* **137**: 61.

- Madani, M.O. and Tirgari, M. (1984). Extrauterine pregnancy in a ewe. *Vet. Rec.* **115**:547-548.
- Mitchell, K.W. (1989). Ectopic pregnancy in a ewe. *Vet. Rec.* **124**: 498.
- Owensby, T., Jackson, K. and Scharf, B. (2001). Failure to deliver in a rabbit with intra-abdominal masses. *Laboratory Anim.* **30**: 23-25.
- Smith, C.A., Stone, D.M. and Prieur, D.J. (1989). Spontaneous profuse superovulation in association with ectopic fetuses in a rabbit. *Laboratory Anim. Sci.* **39**: 74-77.
- Thursby-Pelham RH. (1992). Mare scanning possible ectopic pregnancy. *Vet. Rec.* **130**: 500.