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Successful management of a secondary abdominal pregnancy with partial fetal mummification in a doe

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Abstract

A two and half year old non descriptive doe was presented to Teaching veterinary clinical complex, C.V.Sc & A.H ,OUAT Bhubaneswar with a history of full term pregnancy and some mass was protruding out of the abdomen since 10 days. Animal was apparently healthy with all vital parameters within physiological range. Radiographic examination revealed presence of extrauterine fetus. A partial mummified fetus was removed by surgical procedures and the uterus was completely normal without scar. After surgery the doe was treated for five days and had an uneventful recovery. The present study describes the successful management of a secondary abdominal pregnancy with partial fetal mummification in a non descriptive doe.

Keywords: Management, secondary abdominal pregnancy, partial fetal mummification, doe

Introduction

Secondary abdominal pregnancy is occasionally seen in domestic animals except mare ^[7], but ectopic pregnancies have been described in humans and categorized thoroughly. In this condition, fetus reaches of recognizable size in uterus, and then it escapes either in abdominal cavity through tear in uterus (abdominal pregnancies) or in vagina through cervix (vaginal pregnancies). Ectopic pregnancy means a pregnancy occurring other than in the cavity of the uterus. While this condition is well-known in humans, it is rarely diagnosed in animals. Two types of ectopic pregnancy are mainly recognized: (1) tubal pregnancy occurs, when an oocyte is fertilized and then remains in the oviduct and (2) abdominal pregnancy occurs, when the gestation develops in the peritoneal cavity. The second 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 pregnancy is a condition in which fetus reaches recognizable size in uterus, and then it escapes either in abdominal cavity through tear in uterus (abdominal pregnancies) or in vagina through cervix (vaginal pregnancies). The cause of uterine rupture is largely unknown but, it may occur due to violence or trauma, uterine torsion, weakening of uterine musculature.

Case history and Observations

A two and half year old non descriptive doe was presented to Teaching veterinary clinical complex, C.V.Sc & A.H ,OUAT Bhubaneswar with a history of full term pregnancy and some mass was protruding out of the abdomen since 10 days. Further anamnesis regarding accident or trauma of the goat was unknown. Physical examination revealed that, the doe was dull and depressed .Clinical examination revealed all the physiological parameters were within the range. On palpation of abdomen some mass was felt. Per -vaginal examination revealed the cervix was closed without any discharge. The animal was sent for radiographic examination which revealed fetal skeleton near udder region. Based on all examination the case was diagnosed as false extra uterine pregnancy.

Treatment and Discussion

After confirmation of false extra uterine pregnancy, it was decided to undertake surgical removal of fetus immediately. The surgical site around the fetus was prepared for aseptic surgery. Fluid (Dextrose normal saline) along with supportive therapy (Ceftriaxone 1gm, meloxicam, 4ml) was given prior to surgery.

Lignocaine hydrochloride (2%) was infiltrated in an oblique fashion in the abdominal muscle of the doe around the fetus. Then the ruptured skin and muscles were further incised for removal of Fetus. During removal of fetal mass it was found that the fetus was attached to the mesentery of small intestine by means of fibrous surrounding around the fetus which was separated carefully. It was observed that the fetus has undergone partial mummification. The Uterus was thoroughly checked for any tear but it was completely normal. The abdominal cavity was thoroughly lavaged with normal saline and metronidazole solution. The muscles were sutured in a continuous fashion with chromic catgut (No-1) and skin with simple interrupted suture using braided silk. Post operatively antibiotic (Inj. Ceftriaxone 1 gm, I/M), analgesic (Inj. Melonex, 4ml, I/M), Fluid therapy (Inj. DNS 500 ml, Inj. Metronidazole, 100ml, I/V) and antiseptic dressing with povidone iodine for five days was prescribed and the animal recovered uneventfully.

True ectopic pregnancy can be seen only in primates due to the peculiar placentation, whereas in case of domestic animals secondary ectopic pregnancy occurs commonly ^[4]. In the present study, the secondary abdominal pregnancy occur due to rupture of uterus after implantation of fetus has occurred and then get adhered to the omentum of the dam which corroborates with the study of Kumar et al. (2018a) ^[1] and Smith et al. (1989)^[8]. Ectopic pregnancy associated with scar or uterine tear is an indication that it occurred at a later stage of pregnancy whereas ectopic pregnancy occurring without any scar in the uterus can be considered as an indication of its early occurrence ^[2]. Similar finding is also observed in our study. Transabdominal ultrasonography showing nonviable fetus with absence of fetal fluid is the confirmatory indication of ectopic pregnancy [1, 5, 6, 7 and 9]. The fetuses involved in ectopic pregnancy are usually sterile in nature ^[2 and 3]. Similar findings are also observed in our present study. The removal of ectopic fetus involves careful separation of adhesions without producing any damage to the dam. Animals carrying extrauterine foetuses are appear that healthy and diagnosis of ectopic pregnancy is usually an incidental finding. In the present case the false extra uterine pregnancy can be easily identified by radiography and immediate surgery was performed to save the life of the dam.

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