MUMMIFIED PAPYRACEOUS FETUSES IN THE ABDOMINAL CAVITY OF A DASCHUND BITCH – A CASE REPORT

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ABSTRACT

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This paper reports on successful surgical treatment of papyraceous mummified fetuses in the abdominal cavity of a 6 year old Daschund bitch.

Key words: Papyraceous mummification, Uterine rupture, Bitch

INTRODUCTION

Spontaneous uterine rupture associated with pregnancy is a rare condition that has been reported in few dogs and cats (Lucas et al., 2003 and Hayes 2004). Uterine rupture normally occurs during periparturient period due to trauma or can occur spontaneously in predisposed uterus. Sporadic cases of spontaneous uterine rupture could occur due to erroneous application of oxytocin or prostaglandin or careless obstetrical maneuvers (Hajurka et al., 2005). Fetal mummification is a sterile process due to morphological changes of the retained dead fetus after first third of pregnancy in the presence of a mature fetal skin resistant to autolysis (Linde-Forsberg, 2010). A case of papyraceous fetal mummification after spontaneous uterine rupture and its successful treatment has been reported in this paper.

CASE HISTORY AND OBSERVATIONS

A 6 year old Daschund bitch with a history of mating 4 months before examination without signs of gestation or parturition was presented to Department of Veterinary Gynaecology & Obstetrics, NTR College of Veterinary Science, Gannavaram with clinical signs of anorexia, abdominal distension, purulent vaginal discharges since 15 days. Physical examination revealed the presence of solid structures fluctuating in

the abdominal cavity, pale mucus membranes. Lateral radiograph of abdomen revealed the presence of fetal skeletons. The spines of the fetal skeletons appeared more tightly flexed in position with overlapped cranial bones – Spalding's sign (Fig.1). Hematology revealed severe normocytic normochromic anemia, leukocytosis and absolute neutrophilia with shift to left.

TREATMENT AND DISCUSSION

The bitch was premedicated with atropine sulphate @ 0.04mg/kg b.wt IM. The bitch was placed in dorsal recumbency and a caudal midventral coeliotomy was performed under general anaesthesia using Xylazine and Ketamine combination @ of 1 mg/kg body weight and 5 mg/Kg body weight IV, respectively. Exploratory coeliotomy revealed left uterine horn rupture along with three mummified fetuses in the abdominal cavity adhered to the omentum, kidneys and intestines were identified. The rupture of uterine horn was located 3 cm to the bifurcation along with accumulation of purulent material. The fetuses were removed by separation of adhesions (Fig.2). Ovariohysterectomy was performed and laparotomy wound was closed. On post-operative treatment with antibiotics for 5 consecutive days, the animal had uneventful recovery.

Uterine rupture normally occurs during the periparturient period due to trauma or spontaneously in predisposed uterus due to weakening of the epithelium by degenerated areas, obstruction, necrosis, cystic endometrial hyperplasia, uterine torsion, uterine epithelium defects, fetal or maternal dystocia, fetal overload, careless obstetrics procedures, dead fetus, erroneous oxytocin or prostaglandin application, myometrial impairment after bacterial infection or surgical scars from cesarean section or other uterine surgeries (Morey, 2005; Linde-Forsberg, 2010).

Papyraceous fetal mummification is a sterile process in which the placental fluids are absorbed and the fetal membranes are adhered to the dehydarated fetus, allowing the formation of a dark tissue with a wet surface without odour or secretions (Kennedy and Miller 2007). In the present case it is believed that uterine rupture might have occurred after dystocia during second stage of an unproductive labour, fetal death and onset of mummification process which is demonstrated by complete formation of fetuses. The patient did not exhibit clinical signs of whelping which may be attributed to primary uterine atony.

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Fig 1. Lateral radiograph of abdomen revealed fetal skeletons



Fig.2. Mummified fetuses