FOETAL MUMMIFICATION DUE TO UTERINE TORSION IN A PERSIAN CAT – A CASE REPORT

K.H. Sandeepa1, G. Sudha2, D.H. Chethana, G.N. Rudresh, S. Viswanath, Debajyotisarkar and Mahendra

1M.V.Sc. Student, 2Associate Professor, Veterinary Gynaecology and Obstetrics Department, Veterinary College, KVAFSU, Hebbal, Bangalore – 24.
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A Persian cat aged 3 years in its 3rd parity was referred to Department of Veterinary Gynaecology and Obstetrics, Bangalore. Based on Clinical examination and abdominal ultrasonography the condition was diagnosed as foetal mummification. Exploratory laparotomy revealed foetal mummification attributed to uterine torsion. Ovariohysterectomy was performed aseptically as per standard procedure. The Queen recovered uneventfully.

Keywords: Foetal mummification, Uterine torsion, Persian cat.

Foetal death after ossification of foetal bones generally leads to foetal mummification if there is no bacterial infection concurrent with or causing death of the foetus (Robinson et al., 2003). Foetal mummification usually occurs in late gestation. Mummification occurs as a result of autolytic changes in the foetus, leading to absorption of placental and foetal fluids. Foetal membrane gets shrivelled, gets dried and uterus contracts on the foetus (Roberts, 2004). Mummification is common in polytocous than in monotocous animals. In polytocous species, the mummified foetus is present throughout gestation period and is delivered along with normal viable foetus (Arthur et al., 2001). General categories of known causes of embryonic or foetal death in the dog and cat include chromosome and developmental abnormalities of the foetus, infectious agents, maternal endocrine abnormalities, trauma, exogenous drugs, uterine torsion, and dystocia. These causes change the foetus’s environment and can lead to foetal death and mummification. A mummified foetus can remain inside the animal for months. The clinical diagnosis of a mummified foetus generally occurs by chance, although sometimes signs such as lethargy, fever, and anorexia may appear.

Case History and Clinical Observations

A Persian cat aged 3 years in its 3rd parity was referred with a compliant of inappetance, polydypsia, reduced general activity and reduction in body weight since a week. The queen had a history of kittening two live kittens 19 days back. Clinical examination revealed elevated temperature of 102.9°F with tachycardia, tachypnoea and mild dehydration.

Per vaginal examination of the queen revealed dry and pale vagina with absence of vaginal discharge. Abdominal palpation revealed two hard mass. Abdominal ultrasound revealed twofoetus of approximately 45 days as detected by the biparietal head diameter. It also revealed absence of foetal heart beat, foetal fluid, placental tissue and differentiation of foetal organs was difficult; uterus was tightly contracted over both the foetus. Ultrasonography also revealed part of normal involuting uterus. Since only the skeletal structures were detected the condition was tentatively diagnosed as mummified foetus.

Treatment

An attempt to expel the foetus was made by use a combination of Mifepristone 5mg/kg bid for 4 days and misoprostol 5µg/kg sid for 1 day along with cephelexin oral antibiotic suspension 25mg/kg bid for 5 days. Since there were no signs of expulsion of foetus, and repeated ultrasonographic examination revealed presence of foetus in the same position the cat was subjected to laparotomy. On laparotomy a devitalized uterus with torsion was exteriorized. Two mummified foetuses were found in the uterus,
which are encapsulated. Ovariohysterectomy performed aseptically as per standard procedure through ventral mid line approach under Xylazine (1mg/kg) and Ketamine (11mg/kg) anaesthetic combination.

Post operatively animal treated with parenteral antibiotics cefazolin(25mg/kg) and multi-vitamin syrup for 7 days with alternate day wound dressing. Animal recovered uneventfully and skin sutures were removed after 10 days.

Discussion

Presence of one or more mummified foetus in the uterus along with normal live foetus is observed occasionally in dogs and cats as also recorded by Roberts (2004). In the present case as the history revealed delivery of two normal foetus and clinical examination showed two mummified foetuses, this case showed similarity with the report of Roberts (2004). The live foetuses were delivered normally, the main reason for failure of expulsion of mummified foetuses in this case was uterine torsion as observed by laparotomy. Foetal ossification in cats normally occurs between 35 and 39 days after conception. Mummified foetuses exhibit dense ossification with a compressed, coiled-up skeleton and occupy a relatively small space. This case was similar to the reports of Thilagar et al. (2011), who have reported that uterine torsion is more commonly observed in multiparous females. The uterine torsion is an uncommon condition in cats and may be associated with the final third period of gestation as also mentioned by Thilagar et al. (2011). Uterine torsion can lead to peritonitis, sepsis, endotoxaemia, and disseminated intravascular coagulation, especially when the torsion is due to foetal death as also reported by De La Puerta et al. (2008). The favourable prognosis is related to support treatment to stabilize the clinical condition as early as possible it was in accordance to Ridyard et al. (2000). The uneventful recovery of the queen is attributed to timely diagnosis of the condition along with proper therapy and post-operative care.

References


