JOURNAL OF VETERINARY CASE REPORTS

2023; 3(2):17-20

After Cesarean Operation in a Cat, Long-Term Vaginal Discharge due to Remaining a Part of Kitten in Vaginal Canal

Mehmet Buğra KIVRAK[1], Sakine Ülküm ÇİZMECİ[2a], Muhammed Furkan ÇİFTÇİ[2b]✉

1. University of Cumhuriyet, Faculty of Veterinary Medicine, Department of Obstetrics and Gyneacology, Sivas, TURKEY.
2. Selçuk University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynecology, Konya, TURKEY.
ORCID: 0000-0002-4772-874X[1], 0000-0003-2939-8019[2a], 0000-0001-8333-6500[2b]

Received	Accepted	Published
23.12.2023	28.12.2023	29.12.2023

Bu makaleye atıfta bulunmak için/To cite this article:
KIVRAK MB: After Cesarean Operation in a Cat, Long-Term Vaginal Discharge due to Remaining a Part of Kitten in Vaginal Canal, Atatürk University J. Vet. Sci., 3(2): 17-20, 2023.

Abstract: The material of the case was a 3-year-old female mixed-breed cat which was brought to Selçuk University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynaecology with the complaint of foul smelling vaginal discharge. According to the anamnesis, following the intervention of the owner, the cat was taken to a private veterinary clinic, where she underwent a cesarean section and ovariohysterectomy operation due to dystocia. It was reported that the cesarean section and ovariohysterectomy operation was performed successfully and there were no postoperative complications. Vaginal examination revealed a foul-smelling mucopurulent discharge. An experimental laparotomy was performed with the consent of the owner because of suspicion of Stumph's pyometra after ovariohysterectomy. Since it was determined that there was a hardness behind the cervix in the operation, the canal was controlled by vaginal swabbing. The vaginal canal was examined in detail due to the presence of discharge and the swab touching hard structures. During the examination, it was determined that the structures attached to the end of the swab were bone and that the head, which had been severed during dystocia, had been left in the vaginal canal. Bone fragments of the cranium of the resorbed puppy were removed and cleaned using long-toothed forceps. Failure to analyse the anamnesis correctly has been shown to have a long-term negative impact on a cat's health and welfare. In conclusion, it was concluded that not checking the cervical and vaginal canal during the cesarean section with anamnesis information was as important as the examination.

Keywords: Cat, Dystocia, Fetal bone, Stump pyometra, Vaginal discharge

INTRODUCTION

Veterinarians frequently intervene in cases of dystocia in field conditions. In these cases, the treatment method should be determined by assessing the probability of success of the treatment, the wishes of the patient's owner, and the economic value of the mother and offspring. Cesarean section is one of the most frequently used methods in cases of dystocia (1). Cesarean section is the surgical removal of the fetus by hysterectomy. When the studies conducted to date are examined, 20-30% of dystocia cases can be treated with medical treatment or various methods, while nearly 80% require surgical interventions. Although the success rate is lower and the likelihood of complications is higher compared with vaginal birth, the success rate of caesarean section has increased over the last 10 years (2). However, during cesarean section operations, sterilisation of animals is frequently requested by patient owners. In

✉Muhammed Furkan ÇİFTÇİ
Selçuk University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynecology, Konya, TURKEY.
e-mail: mf.cftc@gmail.com

cats, overiohysterectomy operation is frequently used to prevent pregnancy, control reproduction and eliminate unwanted oestrous behaviour.

Some complications may be encountered after overiohysterectomy operations performed by inexperienced operators. These complications are usually due to the inability to remove part of the ovary or uterus during the operation. As a result of these complications, persistence of oestrus symptoms and vaginal discharge are among the most common findings. As a result of these findings, ovarian remnant syndrome and stump pyometra are usually diagnosed(3,4). Ovarian remnant syndrome is the presence of a functional ovary or ovarian remnant in the abdomen after removal of the ovaries. Ovarian remnant syndrome results in the persistence of proestrus or oestrus symptoms due to continued hormonal activity (5). In addition, stump pyometra may also occur due to increased progesterone concentration as a result of not removing the entire uterus during overiohysterectomy operation (6). In this case, a cat who underwent overiohysterectomy during cesarean section was found to have prolonged vaginal discharge, but no diagnosis was made.

CASE PRESENTATION

A 3 years old female, mixed-breed cat that brought to Selcuk University, Faculty of Veterinary Medicine, Department of Obstetrics and Gyneacology companion animal clinic with complain of foul odour vaginal discharge was constituted material of the study. Based on the anemnesis, approximetly 4 moths ago, during dystocia a kitten's head got severed and stuck into birth canal during animal owner intervention. Animal owner reported that was brought to a private clinic and ovariohysterectomy following ceserian section was succesfully performed and no postoperative complication was observed. Cat was submitted to ultrasonoghrapy and no abnormalities in abdominal cavity was detected in our clinic. Vaginal examination revealed foul smelling vaginal discharge.

An exploratory laparotomy was performed because of suspicion of stump pyometra, which can develop after ovariohysterectomy with the owner's consent. Adhesion between viceral organs and abdominal wall was detected during surgery. A tissue remnant belongs to uterus was not detected and surgery was terminated. Vaginal canal was examined with sterilized swab due to a hardness was palpated caudal of the cervix. Because swab was contacted with hard tissues vaginal canal was reexamined in detail.

In vaginal detailed examination of vaginal canal, hard tissues that was contated with swab is detected to be bones. İt was revealed that head which got severed during dystocia was left in the vaginal canal during ceserian section. The bones belong to cranium of the kitten was extracted with tissue forceps (Figure1-2). Parenteral antibiotic was applied. Following days, vaginal discharge was ceased and cat was fully recovered.

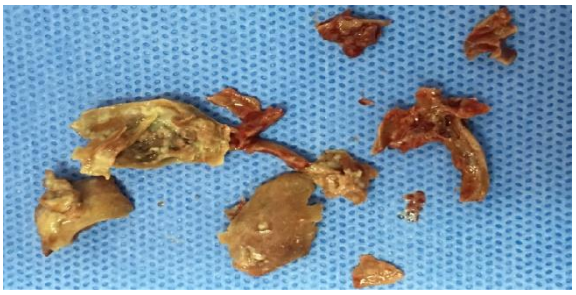

Figure 1. Removal of the cranium bones of the kitten in the vaginal canal

Figure 2. Cranium bones of the kitten in the vaginal canal

DISCUSSION and CONCLUSION

Dystocia may be of maternal or fetal origin. Maternal causes include uterine inertia, stenosis of the birth canal, torsio uteri, presence of vaginal septum and hydroallantois. Among main causes of dystocia, uterine inertia is the major maternal cause of dystocia in cats (7). Dystocia due to fetal causes is less common and includes fetal malformations, large offspring and fetal death (8). Although the cause of dystocia is not fully known in the presented case, it was understood that the intervention for dystocia was incorrect and incomplete, and the necessary treatment was applied to restore the cat's health. In this case, where the importance of anamnesis during clinical examinations was once again demonstrated, the importance of checking the vaginal canal in patients who underwent cesarean section and ovariohysterectomy was understood. The veterinarian's failure to check the canal caused the cat to suffer from vaginal discharge, restlessness, and possible aches and pains for 4 months.

It was determined that incorrected assesment of the history of severed head could adversly affect the cat's health and welfare. In conclusion, inspection of the vaginal and cervical canal during cesarean section is as important as clinical examination.

CONFLICT of INTEREST

There is no conflict of interest between the authors.

REFERENCES

1. Gilroy BA, DeYoung DJ. Cesarean section: Anesthetic management and surgical technique. Veterinary Clinics of North America: Small Animal Practice. 1986; 16(3): 483-494.
2. Gilson SD. Cesarean section. Small Animal Surgical Emergencies. 2015; 391-396.
3. Howe LM. Surgical methods of contraception and sterilization. Theriogenology. 2006; 66(3): 500-509.
4. Brendler CB, Berry SJ, Ewing LL, McCullough AR, Cochran RC, Strandberg JD, Walsh PC.

Spontaneous benign prostatic hyperplasia in the beagle. Age-associated changes in serum hormone levels, and the morphology and secretory function of the canine prostate. The Journal of Clinical Investigation. 1983; 71(5): 1114-1123.

5. Wallace MS. The ovarian remnant syndrome in the bitch and queen. Veterinary Clinics of North America: Small Animal Practice. 1991; 21(3): 501-507.

6. Pearson H. The complications of ovariohysterectomy in the bitch. Journal of Small Animal Practice. 1973; 14(5): 257-266.

7. Ekstrand C, Lindeforsberg C. Dystocia in the cat – a retrospective study of 155 cases. Journal of Small Animal Practice. 1994; 35: 459–464.

8. Holst BS, Axnér E, Öhlund M, Möller L, Egenvall A. Dystocia in the cat evaluated using an insurance database. Journal of feline medicine and surgery. 2017; 19(1): 42-47.