Endometrial Polyps and Adenoma in a Cat with Hydrometra: Case Report

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Abstract: A 1-year-old cat with a suspected abortion was brought to the clinic of the Department of Obstetrics and Gynaecology, Faculty of Veterinary Medicine, Ankara University. The cat was examined because of a reoccurrence of a bloody vaginal discharge. Failure to detect a foetus by ultrasonography and the presence of an anechoic zone in the uterus revealed that there had not an abortion. Since the anechoic zone was large, it was thought that a pharmacological approach would not be successful. Despite the vaginal discharge, the physical condition of the patient was suitable for surgery. Therefore, we decided to perform an ovariohysterectomy. Histopathological examination of the uterus revealed adenoma, hydrometra and proliferative polyps in the endometrium.

Key Words: Adenoma, cat, endometrial polyps, hydrometra

Hidrometralı bir Kedide Adenom ve Endometrial Polipoid

Özet: Ankara Üniversitesi Veteriner Fakültesi Doğum ve Jinekoloji Anabilim Dalı Kliniğine 1 yaşlı bir kedi abort şüphesi ile getirildi. Tekrarlayan kanlı vaginal akıntıdan dolayı hasta gözetimimiz altına alındı. Ultrasonografide fötüs gözlenmediğinden ve uterusta anekojen bir alan olduğundan bu vakanın abortus olmadığı sonucuna varıldı. Kedide, ultrasonografi ile tespit edilen anekojenik alan büyük olduğundan medikal yolla tedavi edilemiyeceği kanısına varıldı. Vaginal akıntıya rağmen hastanın genel durumu operasyon için elverişliydi. Bu yüzden, ovariohisterektomi yapılmasına karar verildi. Uterusun histopatolojik incelemesinde endometrial polipler, adenom ve hidrometra tespit edildi.

Anahtar Sözcükler: Adenom, kedi, endometrial polipler, hidrometra

Introduction

Benign uterine tumours include leiomyoma, fibroma, fibroleiomyoma, fibromyoma, fibroadenoma, adenoma, lipoma and endometrial polyps.

Endometrial polyps are benign and characterised by focal, cystic proliferations of the endometrial glands associated with stromal changes. They are broad based or pedunculated. When they invade the uterine lumen, they appear as multi-lobular masses containing numerous small cysts under ultrasonography (1).

Hydrometra and mucometra, defined as the accumulation of non-inflammatory, clear to slightly cloudy, watery to viscid, sterile fluid in the uterine lumen, occur occasionally in the cat (2). Impatency of the vulva, vagina, cervix or uterus resulting from congenital anomaly,

neoplasia, inflammation and scarring or accidental ligation leads to hydrometra and mucometra. The volume of the fluid in the uterine lumen may be as high as 500 ml (2). Therefore, the uterus is thin-walled (3).

Normal pregnancy may be distinguished from hydrometra and mucometra by monitoring the presence of a fluid-filled uterus in the absence of a foetus or foetuses with the use of B-mode ultrasound imaging (4).

Abel (5) observed a uterine horn with a diameter of 4.5 cm in a cat with hydrometra. He also reported that endometrial polyps may range from 1.1 to 2 cm in size.

Case History

A cat was brought to the clinic of the Department of Obstetrics and Gynaecology, Faculty of Veterinary

Medicine, Ankara University, with a suspected abortion. The owner stated that the cat was a 1-year-old and had mated 45 days prior to the clinical examination. The owner also stated that the cat had had a bloody vaginal discharge 3 days before the evaluation. Because of the reoccurrence of the vaginal discharge, a clinical examination of the cat was performed.

During the examination, the cat was in good physical condition and its temperature was normal (38.6 °C). However, pale and fresh blood was detected on the vulva and perineum and in the vagina during inspection and vaginoscopic examination. Despite detecting anechoic areas, ultrasonographic examination did not reveal any signs of a 45-day pregnancy such as we had been led to expect (Figure 1). Because the cat's physical condition was suitable for surgery and vaginal discharge was continuing, we decided to perform an ovariohysterectomy.



Figure 1. Ultrasonographic view of a large anechoic zone in the uterus.

The cat was premedicated with atrophine sulphate (0.04 mg/kg, SC) and xylazine hydrochloride (2 mg/kg, IM). General anaesthesia was induced using ketamine hydrochloride (10 mg/kg, IM). Ovariohysterectomy was performed at the left fossa paralumbalis. During the operation, it was observed that one of the uterine horns was enlarged while the other was normal (Figure 2). The uterus was preserved in 10% formaline for histopathological examination. Following the operation, cefazolin sodium (125 mg twice a day for 5 days, IM) was given. A liquid diet was supplied for 3 days.



Figure 2. Enlarged uterine horn.

Results and Discussion

Seven days after the operation, the skin sutures were removed and there was a complete and uneventful recovery. According to a report from the Department of Pathology, Ankara University, on 10/07/2002, protocol number 349/02, histopathological examination of the uterus revealed adenoma, hydrometra and proliferative polyps in the endometrium (Figure 3).



Figure 3. View of the uterine lumen.

Since the history indicated an abortion, we performed ultrasonography for differential diagnosis. Because ultrasonography did not reveal conceptus, heart beat and ossification, which are signs that might have been detected in pregnancy around day 45, we decided that the case was not an abortion. In contrast to Gelberg and McEntee (1), who reported that endometrial polyps are seen as multi-lobular masses under ultrasonography, no endometrial polyps were detected.

References

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The present study reports a case of endometrial polyps and adenoma with hydrometra in a 1-year-old cat following ovariohysterectomy and histopathological examination of the uterus.

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