

A Case of Unilateral Hydrometra in a Cat Alper Yasin ÇİPLAK¹✉

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Abstract: Hydrometra is an uterine pathology caused by the accumulation of a non-infectious, non-inflammatory, clear and sterile fluid in the uterine lumen. Hydrometra is usually caused by progesterone hormone and can be diagnosed by transabdominal ultrasonography, vaginal cytology and haemogram-biochemistry analysis. Hydrometra cases can occur in all species and are rarely observed in cats. The material of this case report consists of a 3.5 years old female Tabby cat, weighing 3 kg, who was brought to Erzurum Atatürk University Animal Hospital with a request for ovariohysterectomy. As a result of clinical examinations, unilateral hydrometra was detected in the operated cat. In conclusion, it should be kept in mind that hydrometra is a non-infectious uterine pathology and may occur in patients with good general condition.

Keywords: Cat, Hydrometra, Unilateral, Uterine Pathology

INTRODUCTION

Hydrometra is caused by the accumulation of a non-inflammatory, sterile, clear/slightly turbid, sterile fluid in the uterine lumen and is rarely seen in cats. Hydrometra cases, which usually occur in the diestrus phase, may be caused by increased progesterone level, congenital anomalies, scar tissue, physician error (mistaken ligation) and genital canal neoplasms (1,2). In cases of hydrometra seen in cats, about 500 mL of sterile fluid accumulates in the uterine lumen and this accumulated fluid causes thinning of the uterine walls (2). Methods including transabdominal ultrasonography, haemogram-biochemistry analysis and vaginal cytology may be used in the diagnosis of hydrometra. Ultrasonographic examination shows an enlarged anechogenous uterine lumen. Hydrometra cases do not cause any change in blood

values because they are noninfectious. In addition, vaginal cytology does not show neutrophil density at a level to indicate the presence of infection (3). In the present case report, a rare case of unilateral hydrometra in a cat brought to Atatürk University Animal Hospital with a request for ovariohysterectomy is evaluated.

CASE PRESENTATION

The case material consisted of a 3.5 years old female Tabby cat, weighing 3 kg, who was brought to Erzurum Atatürk University Animal Hospital for spaying (ovariohysterectomy). Before the operation, the cat was routinely examined for general condition, estrous cycle and haemogram-serum biochemistry analysis. In the clinical examination, it was determined that the general condition of the cat was good; body temperature, pulse and respiration rates and blood analysis

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results were between reference values and the cat was not in estrous. As a result of the data obtained, it was decided to take the cat to the operation. The operation was performed from the lateral line (Left Fossa Paralumbalis) under general anaesthesia with butorphanol (0.5 mg/kg SC, Richter pharma, Butomidol, Austria), medetomidine (60 µg/kg IM, Orion pharma, Domitor, Finland) and ketamine (10 mg/kg IM, Vetagro, Vetaketam, Poland). When the abdominal cavity was reached during the operation, it was determined that the right uterine horn was 2-3 times larger than the left uterine horn (Figure 1).

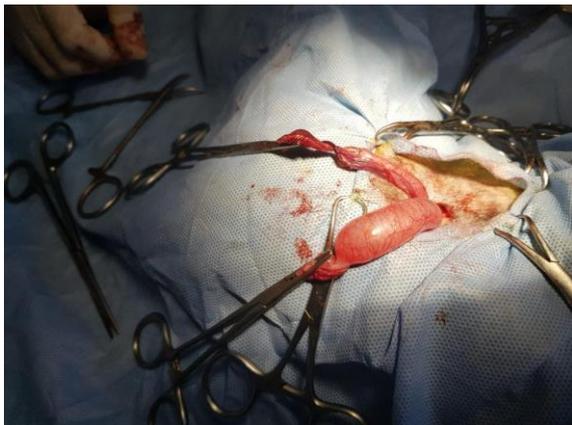


Figure 1. Uterine cornu with Hydrometra

The ovaries/uterus was carefully excised because the ligaments and vessels were fragile. After the operation, the hyperplastic uterine tissue removed from the abdomen was opened with the help of a scalpel and its contents were checked and the presence of a serous fluid accumulation was determined. No neutrophil infiltration was detected in the pathologically examined serous fluid. The patient was treated with prophylactic antibiotic (8.75–

25 mg/kg SC, Synulox, Zoetis, Türkiye) after the operation. The general condition of the patient was observed to be good 1 week after the operation.

DISCUSSION and CONCLUSION

Unilateral hydrometra is a rare pathological phenomenon in female cats. In cats, hydrometra is an uterine pathology that occurs with fluid accumulation in the uterus as a result of progesterone hormone causing increased secretion in the endometrial glands, thickening the endometrium and decreasing myometrial contractility and causing the uterine cervix to remain closed (4). In addition, exposure to the progestative phase resulting from the continuity of the sexual cycle causes uterine pathologies such as hydrometra to be observed in middle-aged and elderly cats (5). In our case, the fact that the cat did not show signs of oestrus and was 3.5 years old suggests that this case may have been caused by a progestative phase. In contrast to the present case report, in a study, hydrometra in a dog with granulosa cell tumor in the ovary was thought to occur due to high estrogen level (6).

In cases of hydrometra, ultrasonographic examination helps the diagnosis. In hydrometra, an enlarged and anechoic uterus is usually seen on ultrasonographic examination (7). However, in the case presented, the cat was taken directly to the operation without ultrasonographic examination because there was no difference in the anamnesis obtained from the owner and the blood

parameters were within the reference values.

Cytological examination of vaginal secretions plays an important role in the differential diagnosis of uterine pathologies (hydrometra, pyometra, haematometra) (1). Since the case of hydrometra was of non-infectious origin, neutrophil infiltration was not found in cytological examinations (8). In the presented case, no neutrophil was found in the microscopic examination of the sample taken from the uterine lumen after the operation.

In conclusion, unilateral hydrometra is a rare uterine pathology in cats characterised by enlargement of the uterine lumen due to increased noninfectious secretion in the uterus without affecting the general condition.

CONFLICT of INTEREST

There is no conflict of interest between the authors.

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