Koker Irkı Dişi Bir Köpekte Operasyondan Sonra Fark Edilen Hiperplazi Tespit Endometrial Unilateral 34851


Anahtar Kelimeler: Dişi köpek, uzayan proöstrus, kongenital anomaliler, uterus.

Summary: In this case report, an uterus unicornis diagnosed following an operation in a 12 years old sexually intact Cocker Spaniel bitch presented to the clinic at the Faculty of Veterinary Medicine, University of Istanbul with a complaint of prolonged vulval bleeding going on more than 5 weeks has been presented. Extended proestrous was diagnosed based on anamnesis and the clinical findings. An ovariohysterectomy was performed from the mid-line ventral abdominal wall in a routine manner. Visual examination of the reproductive tract during the surgery revealed absence of the left uterine horn, thickness of the right uterine horn and a polycystic left ovary. Histopathological examination of reproductive organs revealed unilateral cornual agenesi and cystic endometrial hyperplasia with an ovarian and para ovarian cysts. In conclusion, despite of regular estrus cycles as in this case, unilateral cornual agenesi should be taken into consideration as a possible hidden reason of infertility in bitches.

Key Words: Bitch, prolonged proestrous, congenital anomalies, uterus.
A combination of xylazine (0.6 mg/kg IM, Basilazin %2, Animedica GmbH, Germany) and ketamine (10 mg/kg IM, Ketasol %10, Richterpharma, Austria) was administered following the premedication with atropine (0.04 mg/kg SC, Atropin, Vetas, Turkey). After the maintenance of anesthesia, the ventral abdomen was clipped and routinely prepared for surgery. Warm Lactated Ringer solution was administered through a 22 GA cephalic catheter at the rate of 4 ml/kg of body weight. During the surgery, while extracting the uterus pulling from right horn, it is noted that the left horn is not present and appeared only as a serosa membrane (Fig. 1). On the same side, the ovary was polycystic. Prominent follicle on ovary and para-ovarian cyst were notable (Fig. 2). The right uterine horn appeared to be thick, had endometrial hyperplasia due to estrogenic effect. This thickness appeared to be more prominent around bifurcation than in the cranial part (Fig-2). On the side of the existing uterine horn, the ovary was very small and inactive. Abdominal cavity was closed as in normal ovariohysterectomy and a 0 number of Vicryl used as a suture material.

In uterine histopathology, corpus uteri and right uterine horn had cystic endometrial hyperplasia. The left horn was not present, and the ovary was polycystic and the para-ovarian cysts were prominent.

Following the surgery, enrofloxacine (%5, Batril®- K, Bayer Turkey) and a vitamin combination (Epargriseovit; DEVA Holding A.Ş., Turkey) were used for a week and the animal was closely monitored. About a week later, the animal was released without any complication following the removal of the sutures.

**Fig. 1-** An unilateral cornual agenesis and ovary cysts in a Cocker Spaniel.
**Şekil 1-** Spaniel Cocker ırkı dişi bir köpekte unilateral kornual agenesi ve ovaryel kistler

UB: Uterine body, RU: Right uterine horn, RO: Right ovary, LO: Left ovary
UB: Korpus uteri, RU: Sağ kornu uteri, RO: Sağ ovaryum LO: Sol ovaryum

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**Fig. 2.** Cystic structures on the ovary on the side of the non-formed uterine horn (uterus unicornis).
**Şekil 2.** Oluşmayan uterus kornusunun (unilateral kornual agenesi) bulunduğu sol taraflı ovaryumda kistik yaplar
LO: Left ovary, LO: Sol ovaryum

**Discussion**

Female dogs with uterus unicornis who have ovaries are known to show typical estrus behavior (2). In this case, the Cocker Spaniel has shown typical estrus behavior in each cycle in all past seasons. During this last cycle, she was in extended proestrus because of the anovulatoric follicular cysts on the ovary on the side of non-existing uterine horn (uterus unicornis).

Karyotyping genetic investigation shows hermaphrodit to be inherited in Cocker Spaniel (3, 7). There was not any phenotypical findings showing that this unilateral cornual agenesis might be related with hermaphroditism which is thought to be inherited in Cocker Spaniel. It has been reported that in this type of gonadal sex abnormalities, internal genitalies in all affected dogs includes a complete bicornuate uterus but oviduct may or may not be present. We could not investigate the association between unilateral cornual agenesis and hermaphroditism in order to comment specifically on the issue as we were not able to conduct a chromosomal analysis.

The diagnosis of congenital defects related to ovaries and uterus could be made directly by laparotomy or laparoscopy but mostly they are diagnosed incidentally while performing an ovariohysterectomy operation (4). In female dogs with bilateral cornual agenesis, the establishment of pregnancy is not possible; in case of unilateral agenesis pregnancy changes are slim even if conception occurs because abortion is likely due to insufficient endometrial surface (2). In this case, the Cocker Spaniel has had normal regular cycles, but it had never copulated so It is not known whether pregnancy or
abortion would have occurred or not. Moreover, in this cycle if the dog would have been copulated, and that ovulation have occurred she would not have become pregnant as the follicles were on the ovary on the side of non existing uterine horn. In a study related to women, it was indicated that cornual agenesis is widely encountered as a congenital uterine defect and pregnancy in those women results in abortions in 35% of the cases (5). In conclusion, the congenital unilateral cornual agenesis can be the main hidden causes of infertility in female dogs despite of many regular normal estrous cycles.

References


