

# SECONDARY ECTOPIC PREGNANCY IN AN ANGORA CAT: A CASE REPORT

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## Bir Ankara Kedisinde Belirlenen Sekonder Ektopik Gebelik Olgusu

**Özet:** Sunulan bu gözlem ile 15 aylık bir Ankara kedisinde uterus rupturunu takiben şekillenen sekonder ektopik gebelik olgusu tanımlanmıştır. Diğer ektopik gebelik olgularından farkı, uterus rupturundan yaklaşık 6 ay sonra ektopik gebelikte birlikte bir erken gebelik tablosunun da belirlenmesidir.

**Anahtar kelimeler:** Ektopik gebelik, kedi.

**Summary:** This case represents secondary ectopic pregnancy occurred following the uterus rupture in a fifteen-month-old Angora cat. The difference from other ectopic pregnancy cases is presence of early pregnancy together with ectopic pregnancy about 6 months after uterine rupture.

**Keywords:** Cat, ectopic pregnancy.

## INTRODUCTION

Ectopic pregnancy generally recognized as primary or secondary. Primary ectopic pregnancy can occur as a result of the fertilized ova entering the peritoneal cavity and attaching to mesentery or abdominal viscera. On the other hand, secondary ectopic pregnancy may occur following trauma or rupture of the gravid uterus where the developing fetus is lost into the peritoneal cavity (5). Although secondary ectopic pregnancy has been reported occasionally in all domestic animals, the actual incidence in cats is unknown (6, 8).

The present case represents secondary ectopic pregnancy occurred following the uterus rupture in a cat. The difference from other ectopic pregnancy cases is presence of early pregnancy together with ectopic pregnancy about 6 months after uterine rupture.

## MATERIAL AND METHODS

A fifteen-month-old Angora cat was admitted to Emergency Service, Faculty of Veterinary Medicine, University of Ankara, which was suffering from inappetence and emesis. According to owner, six months prior to the admission she gave one kitten being stillborn without supervision in her first litter, no further kittens were born and no more straining efforts were made, but she was lethargic, listless and had uncommonly vomitus for two weeks following this delivery. The animal was not taken any medical treatment during this period and then it was appeared to be normal. The cat mated three times fifteen days before admission to clinic for referral and she had inappetence, emesis and polydipsia twelve days after mating.

## RESULTS

Patient's body temperature was 40.3°C. A CBC revealed only slight leukopenia and neutropenia. In abdominal palpation the firm

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movable, spherical masses located in the middle portion of the abdomen was detected.

Abdominal ultrasonography was carried out in dorsal recumbency and obtained an echogenic square shaped mass in anechogenic sac close to the spleen (Fig.1).



**Fig.1:** Ultrasonographic appearance of echogenic square shaped mass into anechogenic sac, 23 mm in dimensions (arrows)

**Şekil.1:** 23 mm çapındaki anekojenik kese içindeki ekojenik kitlenin ultrasonografik görünümü (oklar).



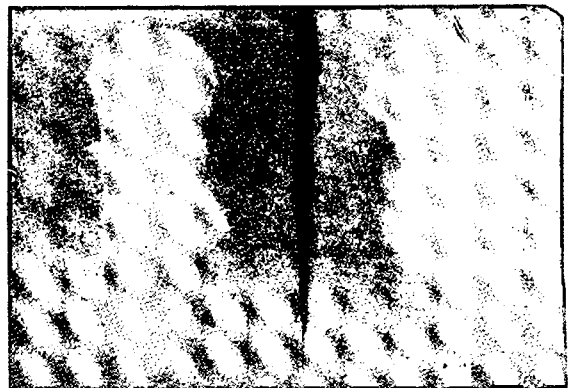
**Fig.2:** Intraoperative view of the placental membranes attached to scar (small arrows) and the embryonic enlargements on the uterine horn (big arrows).

**Şekil.2:** Plasental membranların skara yapışma bölgeleri (küçük oklar) ve kornu uteri üzerindeki embriyonik genişlemelerin (büyük oklar) intraoperatif görünümü.

With the owner's consent, at surgery, the standard ventral mid-line laparotomy was made through the linea alba. When abdomen was opened, a mummified fetus covered by thin transparent membrane was noticed. This fetus quite firmly adhered to omentum

immediately posterior to the spleen. Exploration of the uterus was revealed that there had been an early pregnancy (approximately fifteen days) and a scar on the right horn, proximal to the bifurcation. The placental membranes were connected with the surface of the uterine rupture and were not completely drop out of the uterus or into the abdominal cavity. The embryonic enlargements being the sign of the early pregnancy were located both on the left horn and on the right horn just distal to the uterine rupture (Fig.2). Also, corpora lutea were observed on both ovaries. The peritoneal surface were normal and no gross evidence of generalized peritonitis. The mummified fetus was dissected gently and routine ovariohysterectomy was performed. The abdomen was irrigated several times with warm isotonic saline to remove as much debris as possible and the incision was closed in the usual way. After removing the ovaries and uterine horns, the early pregnancy status was accurated by the observation of the implantation sites after the dissection of the distinct swellings on both horns of uterus. The cat recovered uneventfully.

The membranes which covered fetus were contained the light mucoidal fluid. The mummified fetus measured as 6.0 cm from crown to rump and mid-dorsal to mid-ventral dimension was 2.5 cm (Fig.3).



**Fig.3:** Ventro-dorsal radiographic view of the mummified fetus.

**Şekil.3:** Mumifiye fötusun ventro-dorsal radyografik görünümü.

## DISCUSSION

Primary and secondary ectopic pregnancy have been previously reported in cats (1, 3, 4, 7, 9, 10). The cause of ectopia of the fetuses may be related to injury or traumatic rupture of the uterus during pregnancy or to abnormal disposition of the ovum after its fertilization (2).

The present occurrence probably represents a secondary ectopic pregnancy in which the fetus dropped out of the uterus by means of a tear in the uterine wall. The fetus escaped from uterus into abdominal cavity following uterine rupture underwent mummification due to inadequate blood supply (1, 4). To determine the precise time and the origin of the uterine rupture in this case were impossible because the owner had been given us insufficient history. But, if it is take into account of her suffering from inappetence and emesis immediately after parturition and of litter dimensions we could be suggested that the rupture must have occurred the result of abdominal trauma at the time of parturition.

The interesting point in this case was the appearance of discrete uterine swellings that represent early placental development after breeding on both horn together with secondary ectopic pregnancy. We have not been observed whether the development of the fetuses would continue until term or not, due to perform the ovariohysterectomy at surgery. Also, we have been suggested that the recurrence of inappetence and vomitus again six months later together with early pregnancy would probably be regard aseptic peritonitis occurred by means of secretion leaking from perforation point of uterine horn.

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