



CASE REPORT

Uterine prolapse in a Pointer bitch

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Özet

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Bu olgu sunumu, köpeklerde az rastlanan bir durum olan prolapsus uterinin, 2 yaşlı pointer ırkı bir köpekte tanımlanmasını içermektedir. Köpek, normal bir gebelikten sonra ölü ve büyük bir yavru doğurma hikâyesiyle geldi. Prolabe olan kısım ödemli, solgun ve nekrotik alanlara sahipti. Köpeğin genel durumu iyiydi. Tedavi amacıyla ovariohisterektomi operasyonu yapıldı. Laparotomi sırasında her iki kornu uterinin korpus ve serviks uterinin içine invagine olduğu tespit edildi.

Abstract

Agaoglu AR, Kocamuftuoglu M, Cetin Y, Celik MT. Uterine prolapse in a Pointer bitch. *Eurasian J Vet Sci*, 2012, 28, 3, 182-184

A case of uterine prolapse in a 2-year-old Pointer bitch, which is an uncommon occurrence, is described. The bitch was presented with a history of recent parturition, with delivery of a huge dead puppy. Everted mass was discoloured, oedematous. There were some necrotic areas on the everted tissue. The bitch was presented in good physical condition. Ovariohysterectomy was performed as a purpose of treatment. During laparotomy, it was found that both of uterine horns were invaginated in to the uterine body and cervix uteri.

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The complete or the partial form of uterine prolapse is an uncommon postpartum condition in the bitch. A prolapse occurs when an organ turns inside out and protrudes through a normal body opening. Uterine prolapse occurs from a prolonged labor, up to 48 hours after whelping, when the cervix is extremely dilated. The reasons for a uterus to prolapse may involve dystocia, prolonged whelping, oversized fetus, multiple pregnancies, and laxity of uterine ligaments, excessive abdominal contractions, uterine atony and placental detachment (Wood 1986, Öcal 2001). Anatomical structure of bitch uterus is Y-shaped with 2 horns, either one or two horn may evert into the vagina. Single horn prolapsed is termed partial and prolapsed of the both horns is termed complete (White 2004). If only one horn prolapses and the other horn may still contain live pups, they will likely need to be delivered by Caesarean section. Uterine prolapse in bitches is observed in <0.03% of animals (Wood 1986). The uterine segments protrude toward the vaginal opening in cases of uterine prolapse. Uterine segments may appear at the vulva, in variable size. The prolapsed process will commonly occlude or rupture the ovarian vessels resulting in haemoperitoneum (White 2004).

Severity of the clinical signs and prognosis depend on the duration of the prolapse. The determining factor in choosing a method of treatment is whether or not the bitch is intended for breeding purposes in the future. If the uterine tissue is still viable, surgery can be done to place the prolapsed tissue back with the uterus. If replacement is to be attempted, it should be performed early following the prolapsed, but it is often easier to treat the condition by ovariohysterectomy. In general, there are necrosis and inflammation on the prolapsed tissues. In such case, manual reduction and repositioning of the uterus is impossible. In cases where the bitch is not going to be bred in the future, the only curative method is a complete removal of all reproductive organs (Hedlund 2007).

A 2-year-old, primiparous, weighing 15 kg pointer bitch, with uterine prolapsed. The bitch was admitted to the Obstetrics and Gynecology Clinics. The owner stated that the condition occurred after delivery of a dead large fetus three days ago. The clinical parameters were found in normal limits after the clinical examination (Table 1). The external urethral opening was visible, dysuria or stranguria were not found.

Table 1. Clinical parameters for the Pointer bitch at the clinical examination.

Parameters	The measured value	Reference value (Dunn 200)
Temperature (°C)	38.6	37.5-39
Heart rate (bpm)	115	80-120
Respiratory rate (rpm)	36	20-40

Due to protruding of both of uterine horns partially, the everted tissue was observed in the form of Y letter. The prolapsed tissue was discoloured, oedematous. Some lacerations, external haemorrhages and necrosis were observed on the surface of tissue (Figure 1).

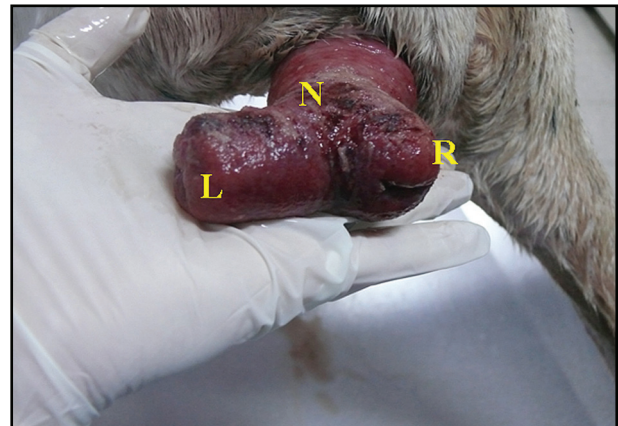


Figure 1. View of the prolapsed uterus. R: right uterine horn, L: left uterine horn, N: necrotic areas.

Hence surgical removal of prolapsed tissue was decided. The everted tissue was cleansed with a 0.2% chlorhexidine solution. For surgical treatment, the bitch was premedicated and sedated using atropine (0.05 mg/kg, SC) and xylazine hydrochloride (2 mg/kg, IM). General anesthesia was induced by using ketamine hydrochloride (10 mg/kg, IM). Ovariohysterectomy operation was performed after repositioning the uterus with combination of traction from within the abdomen and external manipulation through the vulva. During operation, it was found that both of uterine horns were invaginated in to the uterine body and cervix uteri. Ovaries were inspected. Left and right ovaries were small and both of them contained a corpus luteum. There was no follicle on the ovaries. After routine ovariohysterectomy and closure of abdominal wall one single dose of meloxicam (0.2 mg/kg, SC) was administered. The bitch made an unremarkable recovery from surgery. During the postoperative period, the animal was medicated with amoxicillin and clavulanic acid (8.75 mg/kg, SC) for 5 days. The animal was scheduled for re-evaluation at 2 days afterwards. The removal of sutures was achieved by 7 days after the operation.

Uterine prolapse is invagination of one or both uterine horns through the cervix and vagina (Wood 1986, Johnson 1989). Uterine prolapse may also occur in association with the expulsion of one fetus and maternal dystocia because of fetal size. Partial or total uterine prolapse is relatively less common in the bitch than in the queen cat. When analyzed of 182 canine dystocia cases, it wasn't found uterine prolapse in Sweden (Darvelid and Linde-Forsberg 1994). Yet, rate of uterine prolapse was found 0.6% in the 155 dystocia case of queen cats (Ekstrand and Linde-Forsberg 1994).

Dystocia is associated with excessive expulsive efforts and oversized fetus is frequently causative factors of uterine prolapse. Nevertheless, the causes of uterine prolapse are not clear yet. The most cited causes of uterine and vaginal prolapse are the hormonal imbalance (progesterone/estrogen), an increased abdominal tension because of tenesmus, unsuitable obstetrical technique and uterus rupture in the literature (Alan et al 2007, Hedlund 2007, Payan-Carreira et al 2011).

In the case presented here, the bitch was left alone for whelping and the owner didn't notice occurrence of prolapsus. Therefore the moment of occurrence of the uterine prolapse was not determined. The uterine tissue may be necrotic and infected, depending on the duration of the prolapse. In such cases, repositioning of uterus should not be done. The most suitable therapeutic approach for uterine prolapse is surgery (Payan-Carreira et al 2011). Even when uterine repositioning is possible, the ability to maintain a next pregnancy to term is not granted. Uterine function may be recoverable after medical treatment. Yet, uterus may not be returned normal anatomical structure after severe broad ligament stretching.

We concluded that the uterine prolapse was the result of one and huge puppy in the present case. In this case, due to destruction of the uterus mucosa we preferred ovariohysterectomy.

• *Author contributions*

None of the authors of this article has a financial or personal relationship with other people or organizations that could inappropriately influence or bias the content of the paper.

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