

Rectocutaneous Fistula in A Cat: A Case Report

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Summary

A 2-year-old intact male cat weighing 6.8 kg was presented to the Veterinary Medical Teaching Hospital, Adnan Menderes University, with a non-healing wound craniodorsal to the anus. He had previously undergone anal sac surgery two weeks ago and had been on continuous wound therapy in a local animal hospital. Following radiographic and clinical examinations, the problem was diagnosed as an rectocutaneous fistula due to the perforated rectum under the skin. Conservative treatment of the fistula involving the bowel loop resolved all symptoms.

Keywords: *Cat, Rectocutaneous fistula, Anal sac surgery*

Bir Kedide Rektokutanöz Fistül Olgusu

Özet

Adnan Menderes Üniversitesi Veteriner Fakültesi Kliniğine 2 yaşında, 6.8 kg ağırlığında erkek bir kedi anüsün kraniyo dorsalinde iyileşmeyen bir yara şikayetiyle getirildi. Hasta 2 hafta önce özel bir hayvan hastanesinde anal kese cerrahisi geçirmiş ve açık yara sağaltımı görmüştü. Radyografik incelemeler ve klinik muayeneler sonucu, perfore rektum ve deri arasında bir rektokutanöz fistül tanısı konuldu. Fistülün konservatif sağaltım sonucu tamamen iyileştiği gözlemlendi.

Anahtar sözcükler: *Kedi, Rektokutanöz fistül, Anal kese cerrahisi*

INTRODUCTION


Enterocutaneous fistula is defined as an abnormal anatomical passage between the bowels and the skin. In humans, the most common cause of enterocutaneous fistulae has been reported as complication during surgery on the small intestine ¹. In the veterinary medicine, enterocutaneous fistulae have most commonly been reported in large animals resulting from complications in umbilical hernias or their treatment ²⁻⁷. Many reports on fistulas caused by other etiologies in various areas of the body in the small animal practice have been presented, but the enterocutaneous fistula has not been presented except for one report on rectocutaneous and enterocutaneous fistula formation after pelvic trauma in a dog ⁸. Rectal perforation in dogs and cats has been most frequently described in association with pelvic fractures ^{8,9}. Other causes of rectal perforation include penetrating


animal bites, perineal herniorrhaphy or anal sacculotomy, trauma from ingested foreign bodies or intraluminal foreign bodies entering via the anus, iatrogenic tears during rectal examination, improper use of enema tubes, gunshot wounds, and stab wounds ^{9,10}. The following report describes the signs, investigations and management of the rectocutaneous fistula in a cat.

CASE HISTORY

The rectocutaneous fistula in present case was formed following surgical repair of anal sacculitis. This was a rare case of feline rectocutaneous fistula that causes from anal sac surgery. A 2-year-old intact male cat weighing 6.8 kg was presented to the Veterinary

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Medical Teaching Hospital, Adnan Menderes University, with a non-healing wound craniodorsal to the anus. He had previously undergone surgery two weeks ago and had been on continuous wound therapy in a local animal hospital. According to the owner, the cat had constipation over the last six months. The wound had healed under the owner's care but resulted in scar tissue with a thickened skin like mass in the surgery region. Approximately one week later, the cat had treatment in order to repair the scar tissue in the region. After the initial surgery, the wound was not healed and had fecal discharge. When originally presented to our team, the cat elicited signs of pain when palpated over the wound region. The wound region was firm, had an opening of 2 mm in diameter and exhibited maceration around the opening (Fig. 1). A purulent

fluid and feces was observed discharging from the wound opening. Routine hematology and biochemistry profiles were within normal limits. Fistulography with iohexol (Omnipaque™, AmershamHealth, Cork, Ireland) was performed. The origin of the tract was rectum. After the rectal lavage with iod solution, the drainage was seen through a fistula (Fig. 2). Because of the clinical history and the radiologic findings, a diagnosis of rectocutaneous fistula was made. Recommendations were made for treatment with adequate drainage of perineal area and antibiotic therapie. The topical antibiotic and iodine as a drainage were performed for 1 week. Daily treatment with penicillin-streptomycine was continued for 10 days. The follow-up were obtained at 2 weeks after the initial treatment. No recurrence of the fistula has been observed 6 months after the treatment.

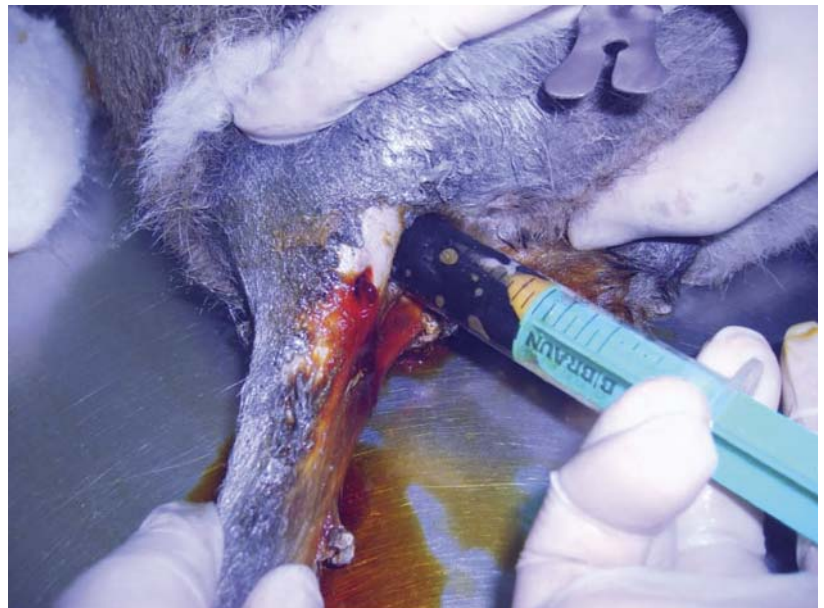


Fig 1. A rectocutaneous fistula in the perianal region in a cat

Şekil 1. Bir kedide perianal bölgede rektokutanöz fistül

Fig 2. Rectal lavage with iod solution. Drainage was seen through the fistula

Şekil 2. İyod solusyonuyla rectal lavaj. Fistül deliğinden drenaj görülüyor



DISCUSSION

Rectal perforation in dogs and cats has been most frequently described in association with pelvic fractures⁸⁻⁹. Overall, rectocutaneous fistulas are very rare in cats. The rectocutaneous fistula in present case was occurred following an anal sac surgery.

Complications of rectocutaneous fistulae include weight loss, chronic diarrhea, fluid and electrolyte imbalances, sepsis, and local infection⁸⁻¹². An experimental model where dogs with enterocutaneous fistulae were fed a normal diet lost 40% of their body weight and became cachectic¹¹. A dog that developed an enterocutaneous fistula following pelvic trauma lost 30% of its body weight and had sepsis⁸. The cat in our report did not show evidence of having a rectocutaneous fistula other than the presence of local infection. The possibility of a fistula without sepsis was considered to the lesion being acute for a period of two weeks and the presence of localized inflammation.

It is often stated that minor retroperitoneal rectal perforations can heal by second intention if adequate drainage is provided^{8,12,13}. However, healing by second intention was reported in only two of eight patients with rectal perforation/rectocutaneous fistula that survived the perioperative period^{2,3,9}. Both of these cases required fecal diversion by colostomy or jejunostomy before a successful outcome was achieved^{3,9}. The size of the defect appears to have little impact on the outcome of the case. In six cases in which rectal defect sizes were reported, the defects ranged from 2 mm in diameter to 20 × 40 mm, with a median length of 17.5 mm^{2,3,8}. In one of the two cases that ultimately required fecal diversion to heal, the rectal perforation was only 2 mm in diameter. Conservative treatment using octreotide is considered to provide a good outcome for fistula treatment and aids in spontaneous closure of the fistula which has been shown to convert high output fistulas to low output fistulas in human cases. However, long-term hospitalization is often required, and surgical intervention may be required in the end¹⁴. In present case, the cat was in optimal clinical and nutritional condition for conservative treatment and the lesion was acute condition.

Although present case was conservatively treated, various types of treatment for rectocutaneous fistula are needed in the small animal practice. No complication of the fistula has been observed 6 months after the treatment.

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