

Case report-Olgu sunumu

A rare complication after hysterectomy: A chronic colo-cutaneous fistula

Histerektomi sonrası nadir bir komplikasyon: kronik kolo-kutanöz fistül

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Abstract

Although adjacent organ fistulas such as the rectovaginal and vesico-vaginal fistula could be seen after hysterectomy, enterocutaneous fistulas are rarely encountered. In literature, enterocutaneous fistulas those are seen after hysterectomy are reported in association to underlying diseases such as tubo-ovarian abscess, coloovarian cyst fistula, diverticular disease and malignancy. In this report, we discussed a case that underwent abdominal hysterectomy by a diagnosis of pelvic mass 1.5 years ago, and in which the colo-cutaneous fistula formation is thought to be caused by a tubo-ovarian abscess or an iatrogenic colon injury that occurred during hysterectomy.

Keywords: Colo-cutaneous fistulas, complication, enterocutaneous fistulas, hysterectomy, tubo-ovarian abscess

Özet

Histerektomi sonrası rektovajinal, vezikovajinal fistül gibi komşu organ fistülleri görülebilmese rağmen enterokütan fistüller oldukça nadir görülmektedir. Literatürde histerektomi sonrası görülen entereokutan fistüller tuba-ovaryan apse, kolo-ovaryan kist fistülü, divertiküler hastalık ve malignansi gibi altta yatan başka bir hastalığa bağlı bildirilmektedir. 1,5 yıl önce pelvik kitle ön tanısı ile abdominal histerektomi geçiren ve kolokütanöz fistül oluşumuna tuba ovarian apsenin veya histerektomi esnasında iyatrojenik kolon yaralanmasının sebep olduğunu düşündüğümüz olgu literatür eşliğinde tartışılmıştır.

Anahtar sözcükler: Kolo-kutanöz fistüller, komplikasyon, enterokutanöz fistüller, histerektomi, tuba-ovaryan abse

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Introduction

A colonic fistula generally occurred spontaneously in association with diverticulitis, cancer, inflammatory bowel disease and appendicitis or caused by surgical interventions which were done for above-mentioned diseases. Colo-cutaneous fistulas usually occur after surgery [1]. In hysterectomy, a rectosigmoid injury could occur due to dissection, cauterization or a passing suture. However, colo-cutaneous fistulas are rarely reported after hysterectomy. This could be due to recognition of intra-operative injury, underreporting of complications, spontaneous closure and fistulization to imminent

organs (such as vagina and bladder). On the other hand, colo-vaginal [2] and vesico-vaginal fistulas [3] secondary to hysterectomy are frequently reported. Women who present with a colo-vesical fistula are commonly elder and/or with a history of hysterectomy [4]. When the literature is investigated, it is viewed that colo-cutaneous fistula associated with genital abnormalities almost invariably occurred after surgery.

Case report

A 62-year-old female underwent abdominal hysterectomy plus bilateral salpingo-oophorectomy with a pre-operative diagnosis of a pelvic mass at a different facility 1.5 years ago. Frozen sections performed during surgery revealed a tubo-ovarian abscess, and surgery was completed in normal fashion. Patient referred to the same hospital which surgery was performed with a seropurulent discharge from the wound site within a month after surgery and treated with antibiotics. However, the seropurulent discharge recurred for 5 or 6 times and a partial healing was achieved with antibiotics in each recurrence. Finally, she referred to our clinic with same complaint 1.5 years after surgery and she was admitted to hospital due to recurrent seropurulent discharge from the Phannenstiell incision. In the anamnesis, above-mentioned history was noted and there was no history of systemic disease. No significant finding was observed in physical examination. In the abdomen, findings were as follows: no tenderness was found in the palpation and bowels had normal peristalsis on auscultation. A purulent discharge was noted with a chronic, unhealed, wound orifice involving the middle of Phannenstiell incision, but no out-flow of gas or fecal content were seen. There was no finding implying a vesico-vaginal or a colo-vaginal fistula or a diverticular disease. Ultrasound scanning revealed a sinus tract extending up to peritoneum. Since patient did not tolerate fistulogram, we failed to display a communication between skin and bowel tract before surgery. Routine laboratory examinations were normal. Patient was prepared as to have an operation under general anesthesia; but operation initiated under local anesthesia. Methylene blue was administered into the wound orifice. Since it was seen that the fistula tract extends under fascia, operation was carried on by general anesthesia. A midline incision was made below umbilicus. After exposing operation site, it was noted that there were adhesions between the sigmoid colon, ileum, vaginal cuff and bladder caused by the previous operation. After resolving adhesions by blunt and sharp dissection, a fistula tract between rectosigmoid junction and skin was demonstrated (Figure 1). Following en bloc resection of the fistula tract, sigmoid colon was sutured at two layers. Pathological evaluation revealed a granulation tissue with chronic inflammation. Post-operative clinic course was mild. No problem was noted during follow-up at 1 year.

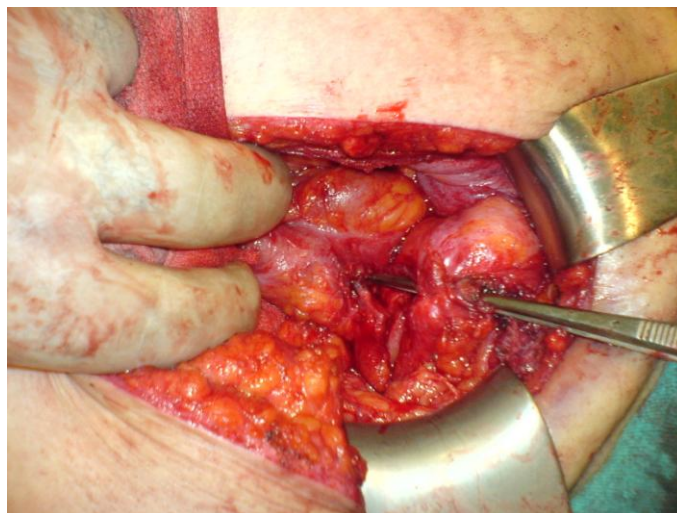


Figure 1. Forceps shows fistula tract and it's orifis on sigmoid colon.

Discussion

Colonic fistulas are generally with a low out-put and less complicated than fistulas which are localized at other regions of gastrointestinal system. Infections caused by a fistula are generally local and can be recovering with surgery [5]. External fistulas can be more easily identified than internal fistulas, since they drain to skin or vagina. They cause fever, erythema and purulent material in wound site and fecal content and gas out-flow from wound site at post-operative period. If there is a doubt, diagnosis can be established by a dye such as Congo red which is not orally absorbed or by contrast imaging modalities [6]. In present case, although it was kept in mind with low probability, we pre-operatively failed to demonstrate fistula. No fecal content or gas out-flow was present in patient's anamnesis. For these reasons, it was predominantly considered as sinus or foreign body reaction. Even it was low, there was a still probability of fistula formation as sinus tract extends up to fascia; therefore, operation was initiated by pre-operative intestinal preparation. No report associated to topic of "colo-cutaneous fistula after hysterectomy" was found in literature. When detailed search was performed in literature, it was seen that, other than malignancy, inflammatory disease of ovary such as pyosalpingitis and tubo-ovarian abscess occasionally cause fistulous communication to the colon, rectum, bladder, uterus and vagina [7]. In addition, there is a number of reports suggesting that presence of benign dermoid cyst or diverticular disease may lead coloovarian cyst fistula [8-11]. In literature, colo-cutaneous fistulas which were developed in patients who underwent hysterectomy for benign reasons became symptomatic and treated in early post-operative period. In our case, there was an unrecognized colo-cutaneous over 1.5 years and no evident symptom was present. In our case, mechanism of fistula formation is unclear; however, to our knowledge, this is the first chronic colo-cutaneous fistula case which was reported in a patient who underwent hysterectomy for tubo-ovarian abscess.

Purposed mechanism for fistula formation is inflammation of cyst or bowel in some way and adhesion between them; thereafter, discharge of content into bowel lumen or cyst [12]. However, granulomatous oophoritis has also been described as one of the causes of colo-ovarian cyst fistula and Gilks et al. [13], reported that intraoperative fistula could not be recognized. It was reported that a colo-vaginal and a colo-cutaneous fistula develops at early post-operative period in these patients. However Skipper et al. [11], considered that fistula may represent a previous tubo-ovarian abscess in these patients. Our patient also underwent hysterectomy due to tubo-ovarian abscess 1.5 years ago. In that operation, frozen sections were reported as a tubo-ovarian abscess. No other surgery exists in our patient's history. Moreover, there isn't inflammatory bowel disease in our patient. Although there was a history of serous discharge and swelling in the sinus orifice of incision line and fever since early post-operative period, no fistula could be detected. We have been thinking that an intra-operative colo-ovarian fistula which was unrecognized may exist and cause to formation of colo-cutaneous fistula. On the other hand, because of mild course after operation and substantially thin fistula tract, a fistula caused by suturing or cauterization is more likely.

When literature was searched for postmenopausal tubo-ovarian abscess, it was observed that there were some series consisting of limited number of cases, In this series, bowel injury was reported as most common complications during operation, whereas colo-cutaneous fistula at post-operative period [14, 15]. However, when complications of hysterectomy are considered, even in larger series, rectal perforation was reported only in 1 or 2 cases [16]. On the other hand, fistula formation to bladder, vagina and inguinal canal due to tubo-ovarian abscess has been reported, even they were case reports [17-21]. In a study by Forsgren et al. [22], It was demonstrated that patients underwent hysterectomy operation for benign reasons had 4 fold increase in likelihood of undergoing an operation for pelvic organ fistula, when compared to those who didn't [22]. In the same study, it was also suggested that intestinogenital fistulas are more

commonly seen than urogenital fistulas [22]. When these data and intense inflammation and adhesions are considered, we concluded that liability of colo-cutaneous fistula development is very low in hysterectomy operation which is performed due to benign reasons, but hysterectomy operations performed due to tubo-ovarian abscess predominantly raised the liability of intestinogenital and urogenital fistula, whereas it rarely raised likelihood of colo-cutaneous fistula development.

When planning an operation due to a tubo-ovarian abscess, particularly in postmenopausal patients, it is needed to plan the operation by keeping in mind that abscess formation should form a fistula at imminent organs; to carefully dissect intra-operative adhesions and to seek a fistulization. In addition, when a chronic orifice is seen at incision line in a patient who underwent hysterectomy for tubo-ovarian abscess, it have to be kept in mind that it should be due to colo-cutaneous fistula, despite it is rare.

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