

Vesicointestinal, Vesicocutaneous Fistula and Tubal Invasion Secondary to Bladder Adenocarcinoma: A Case Report

Mesane Adenokarsinomuna Sekonder Vezikointestinal, Vezikokutanöz Fistül ve Tubal İnvazyon: Olgu Sunumu

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Abstract

Adenocarcinomas constitute less than 2% of primary bladder cancers. Seventy-five year-old female patient presented to the urology clinic with the complaint of urinary flow from suprapubic region which has been continuing for the last 1 month. Endoscopy revealed a vesicocutaneous fistula and a vesicointestinal fistula of approximately 2cm diameter. Lower abdominal midline incision was applied for laparotomy. Bladder was observed to show an advanced level of adherence to adjacent tissues. Ovaries were of cystic appearance and uterus was adhered to bladder. Frozen sections were obtained from the portions where uterus showed adherence to bladder and ovaries. Results of the frozen section analysis suggested malignant invasion. Thus eventually; cystectomy, bilateral salpingoophorectomy, hysterectomy, sigmoidectomy, Hartmann colostomy, and ureterocutaneostomy were carried out on the patient. She was deceased on the 10th postoperative day due to cardiopulmonary arrest. Definitive pathological result was reported as bladder adenocarcinoma and invasion.

Key Words: **Adenocarcinoma; Bladder fistula; Bladder neoplasms.**

Özet

Adenokarsinomlar primer mesane kanserlerinin yüzde ikisinden azını oluşturur. Yetmiş beş yaşında bayan hasta, üroloji kliniğine suprapubik bölgeden bir aydır idrar gelmesi şikayetiyle başvurdu. Yapılan endoskopide yaklaşık 2 cm'lik vezikointestinal fistül ve vezikokutanöz fistül saptandı. Laparotomide göbek altı orta hat insizyonla girildi. Mesanenin etraf dokulara ileri derecede yapışık olduğu izlendi. Overler kistik görünümdeydi, uterus mesaneye yapışık. Uterusun mesaneye ve overlere yapışık olduğu yerden frozen çalışıldı. Frozen sonucu malign invazyon olarak değerlendirildi. Bunun üzerine hastaya sistektomi, iki taraflı salpingooferektomi, histerektomi, sigmoidektomi, Hartmann kolostomi ve üreterokutaneostomi yapıldı. Olgu operasyon sonrası onuncu gününde kardiyopulmoner arrest sonucu kaybedildi. Kesin patoloji sonucu mesane adenokanseri ve invazyon olarak rapor edildi.

Anahtar sözcükler: **Adenokanser; Mesane fistülü; Mesane Neoplazmları.**

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Introduction

Adenocarcinomas constitute less than 2% of primary bladder cancers. Adenocarcinomas are generally encountered in bladder base and dome, however, they may be localized elsewhere in the bladder, as well. These tumors develop due to chronic inflammation or irritation. Majority of adenocarcinomas are of poorly-differentiated, and invasive character (1). Main reason behind vesicoenteric fistulas, is the inflammatory events, particularly diverticulitis cases (2). Malignant enterovesical fistulas are not seen very commonly. While malignancies associated with colon are the main causes, they constitute only 1% of fistulas (3). We see vesicointestinal fistulas, which develop secondary to bladder cancers, in the third place (4).

As far as we investigated; vesicointestinal, vesicocutaneous fistula and tubal invasion secondary to bladder adenocarcinoma, has not been reported in the literature.

Case Report

Seventy-five year-old female patient presented to the urology clinic with the complaint of urinary flow from suprapubic region continuing for 1 month. The patient who had undergone cystolithotomy operation 20 years previously, had also been operated 2 times before 27 and 25 years due to vesicocutaneous fistula. Physical examination showed a good overall condition with a slim appearance. Her blood pressure was 140/80mmHg and temperature was 36.8°C. Abdominal examination revealed a fistula opening localized on the lower abdominal midline and 2cm above pubic symphysis. Laboratory examination results were as follows; Hb:9.2 gr/dL, leukocyte:7.970, Platelets:289000/ mm, fasting blood sugar: 96 mg/dl, blood urea nitrogen: 25 mg/dl, creatinine:1.0 mg/dl, Na: 142 mmol/L, K: 4.4 mmol/L, Cl: 101 mmol/L, AST: 14 U/L, ALT: 12 U/L, total protein: 4.3 gr/dl, albumin: 1.8 gr/dl. E. Coli growth was found in the urinary culture. Antibigram tests showed an E.Coli sensitivity against imipenem, piperacillin/tazobactam, meropenem, nitrofurantoin. Intravenous pyelography showed a normal upper urinary system and an appearance suggesting duplex collecting system; bladder could not be evaluated clearly. USG revealed no pathological results except a fistula tract with a diameter of 3cm, starting from bladder and extending through skin.

Abdominal tomography showed normal liver and spleen. Kidneys exhibited contrast enhancement, ureters were normal with a mild dilatation on the left side. Detection

of contrast agent within intestinal loops adjacent to bladder, was commented as vesicointestinal fistula. Moreover, an appearance of a fistula with 3cm diameter extending to skin in the anterior portion of the bladder, and cysts on bilateral ovaries, were observed as well (Figure 1).

Cystogram and fistulogram were carried out in order to outline the association between bladder and fistular tracts. Grade 5 reflux to left kidney, an appearance localized in anterosuperior portion of bladder consistent with the fistula tract extending to skin at midline, and a passage of contrast agent from posterior portion of bladder to intestines, were detected.

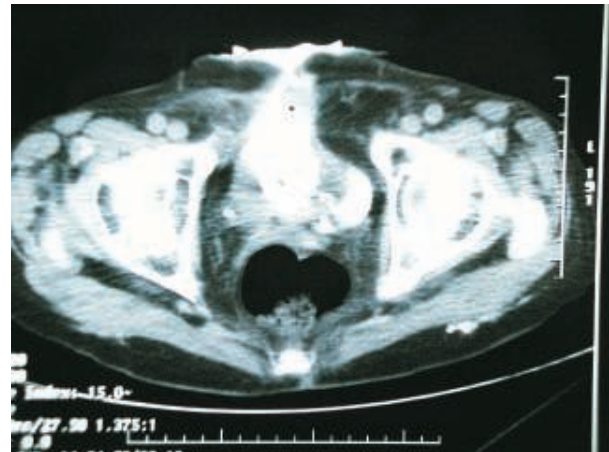


Figure 1. View of skin and intestinal fistulas from anterior aspect of bladder on the tomography section.

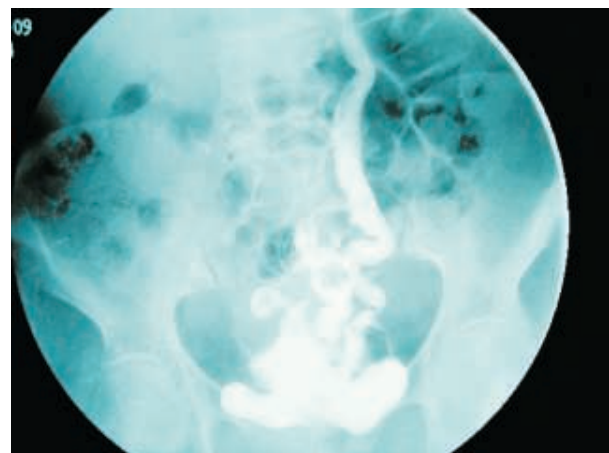


Figure 2. Cystogram showing an intestinal fistula and grade 5 reflux on the left side.

Discussion

Endoscopy carried out under anesthesia, revealed two fistulas, one from bladder dome to skin, and another vesicointestinal fistula of 2cm diameter. Pathology result of the obtained biopsy sample was reported as chronic inflammatory event.

In close consultation with general surgery and obstetrics departments, fistula repair with open surgery was planned. Laparotomy was applied through a lower abdominal midline incision. While bladder was found to be adhered to the adjacent tissues, ovaries had cystic appearance and uterus has been adhered to bladder. A frozen technique was applied from the point where uterus adhered to bladder and ovaries. The results of the frozen samples indicated malignant invasion. Thus; cystectomy, bilateral salpingoophorectomy, hysterectomy, sigmoidectomy, Hartmann colostomy, and bilateral ureterocutaneostomy were carried out on the patient. On the right side, she had bilateral duplex ureters, although one was rudimentary. All four of the ureters were anastomosed to the skin by ureterocutaneostomy. Because postoperative monitoring showed a deterioration of overall condition, general surgery applied a second exploration. Due to determination of diffuse necrotic areas in mesenterium of small intestine, a small intestinal resection of 100cm was carried out and a jejunostomy was opened. The case was kept under close monitoring within intensive care conditions. The patient was deceased because of a cardiopulmonary arrest on the 10th post-op day. Definitive pathological result was reported as bladder adenocarcinoma and invasion.

Bladder adenocarcinomas constitute less than 2% of primary bladder cancers (1). In a study conducted by Zaghoul in 2006, out of 3659 patients subjected to cystectomy, pathology results of 192 (5.2%) were reported as adenocarcinoma (5). Couris and Block reported that 52% of vesicointestinal fistulas occurred secondary to inflammation, 35% due to neoplastic origins, and 13%

as a result of traumatic injury (6). Vesicointestinal fistulas with neoplastic origin are reported to occur secondary to cancer in sigmoid colon (54%), rectum and rectosigmoid (23%), and bladder (16%). In the present case, there were fistulas of colon and skin which were associated with bladder adenocarcinoma. Moreover, bilateral tuba uterina invasion was determined with local invasion. Firmin reported malignant enterovesical fistula incidence as an infrequent case with an incidence of 1% , along with malignities related to colon being the most common reason (3). Initial radiologic assessment of bladder adenocarcinomas is known to be intravenous pyelography for evaluating upper urinary system. Filling defect is observed during cystography.

Computed tomography, magnetic resonance imaging and ultrasonography can be used for showing size, localization, and structure of tumors and for determining their relations with other organs (7). In the present case, upper urinary system was found to be normal in our laboratory analysis. Fistula tracts were observed in cystogram and cystoscopy. However, no mass associated with bladder, was determined in tomography and cystoscopy. Considering the fact that the sample taken during cystoscopy might not have the ability to shed light on the case and taking account of the possibility that a malignant disease might be the underlying condition, open fistula repair operation was planned for the patient. We reviewed the related literature due to this case but no vesicointestinal or vesicocutaneous fistula associated with bladder adenocarcinoma, was found.

In conclusion, in urinary system fistulas without any apparent etiology, possibility of an underlying malignant disease should be considered and the patient should be evaluated in a multidisciplinary approach.

Kaynaklar

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