



CASE REPORT

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AN UNCOMMON RECURRENCE OF CARCINOMA CERVIX IN THE SIGMOID COLON: A CASE REPORT

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Abstract

We present a case involving the rare recurrence of lesions into the sigmoid colon, which manifested nine months after the successful primary resection for cervical carcinoma. This case report emphasizes the approach towards the rare recurrences and management of such cases.

Keywords: carcinoma cervix, sigmoid colon metastasis, case reports

Abbreviations:

FIGO: International federation of gynaecology and obstetrics CIN: Cervical intraepithelial neoplasia

MRI: Magnetic resonance imaging HPV: Human papilloma virus

Introduction:

Cancer-related fatalities are on the rise in the contemporary era, with the Squamous Cell histological variant of cervical carcinoma ranking as the second most prevalent cancer among women globally. Radical hysterectomy or chemoradiation therapy can potentially cure early-stage cervical cancer. However, approximately 30% of treated patients may experience tumor recurrence. Usually, metastasis occurs within the initial two years following treatment, predominantly through direct local extension and the dissemination of cancer cells through the lymphatic system. The lungs and paraaortic nodes are frequently identified as the most prevalent locations for metastatic spread to distant regions[1]. Metastasis to uncommon sites such as the brain, skin, spleen, muscle, and gastrointestinal tract has only been documented in a few cases. Within the gastrointestinal tract, isolated metastasis to the sigmoid colon is exceptionally uncommon. Recurrence of the tumor depends on the lymph node involvement, size of the tumor, depth of the stromal invasion, and involvement of the parametrial tissue and particularly on the negative surgical margins. According to reports, the recurrence rate of cervical lesions is not significantly affected by the histological type and grade [2]. We present a case involving the isolated recurrence of lesions into the sigmoid colon, which manifested nine months after the successful primary resection for cervical carcinoma. The approach to address this recurrence involved an extensive resection, encompassing the left-sided rectus muscle, urinary bladder wall, sigmoid colon, and subcutaneous tissue of the skin, to achieve an R0 resection.



Case Presentation:

We present the case of a 43-year-old woman admitted to our hospital due to intermenstrual vaginal spotting reported a year ago. Upon gynecological examination, a cervical mass was discovered, exhibiting bleeding upon touch. Liquid-based cytology revealed atypical glandular (endocervical) cells. A high vaginal swab biopsy indicated squamous epithelium with features of CIN – 3 and an invasive tumor featuring squamous cells. Immunohistochemistry with p16 confirmed the subtype as HPV-associated. Subsequent pelvic magnetic resonance imaging (MRI) results were consistent with cervical cancer invading the upper third of the vagina, classified as Stage II according to the FIGO classification. A PETCT scan revealed an FDG avid soft tissue mass lesion in the cervix, indicative of malignant pathology. A cervical biopsy confirmed the diagnosis of squamous cell carcinoma of the cervix, Human papilloma virus(HPV)-associated, with a histological grade of Grade 3 – Poorly differentiated.

Following the initial surgery, which encompassed Laparoscopic radical hysterectomy, salpingo-ovariectomy, bilateral pelvic lymphadenectomy, and para-aortic lymph node sampling, a comprehensive intraoperative examination revealed no observable lesions in vital abdominal and pelvic organs. The smoothly executed procedure resulted in the complete extraction of the uterus containing the lesion, classified as R0, measuring 5×4×2.5 cm and situated in the left and right inferior (posterior) quadrants. With a stromal invasion depth of 2.5 cm and cervical stroma invasion extending into the middle one-third, the pathological stage was determined as pT1b3, and the FIGO stage as IB3. Following successful surgery, the patient, discharged in relatively good health, received a recommendation for 16 cycles of adjuvant radiotherapy during the follow-up period, emphasizing the importance of meticulous postoperative care and the strategic approach to further treatment for improved prognostic outcomes.

Two months later, the patient was readmitted, presenting complaints of difficulty passing stool and abdominal pain. An MRI was conducted, revealing a solid nodule in the left lower para midline abdomen, measuring approximately 3.6cm × 3.5cm × 5.7cm. The nodule exhibited peripheral enhancement and central cystic–necrotic changes, with the central cystic non-enhancing part measuring approximately 1.8cm × 1cm. The periphery of the nodule displayed a low signal on T1, a heterogeneous high signal on T2 images, demonstrating restricted diffusion and low signal intensity on apparent diffusion coefficient(ADC) map images. Several areas of high fluid signal intensity were observed at the superior aspect of the nodule on T2 images. Anteriorly, the soft tissue nodule abutted and potentially partially infiltrated the left lower rectus abdominis muscle, which exhibited high signal intensity, although no evident extension into ventral subcutaneous fat was observed. Postero-superiorly, the nodule abutted the junction of the sigmoid and descending colon, with suspected serosal/muscular infiltration and mild enhancement of the contiguous segment of the sigmoid–distal descending colon.

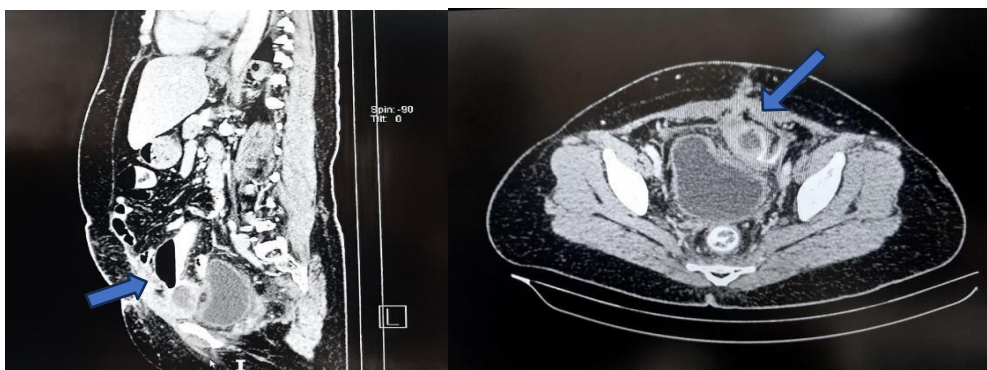


Figure 1. CT was also done confirming the recurrence of the tumor invading the sigmoid colon, left rectus muscle and urinary bladder

A referral was given for a colonoscopy-guided biopsy showed a large ulceroproliferative, submucosal infiltrating growth seen in the descending colon causing significant luminal narrowing (Figure 1).

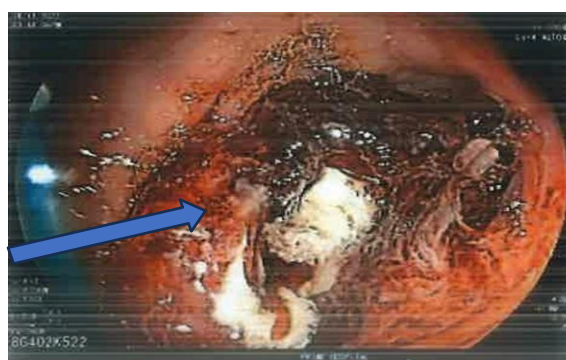


Figure 2. Colonoscopy shows infiltrating tumor through the sigmoid colon occupying 80% of the lumen. Scope could not be passed through fully (Arrow).

She then underwent laparoscopic en mass resection of left side resection of the rectus muscle, urinary bladder wall, sigmoid colon, skin, and subcutaneous tissue to achieve R0. Post-operative mass excision biopsy was taken and revealed sections from the tumor composed of large nests of malignant cells. Tumor is infiltrating into colonic wall and infiltrating into full thickness colonic mucosa with ulceration. Adjacent colonic mucosa and both colonic margins are free of tumor.

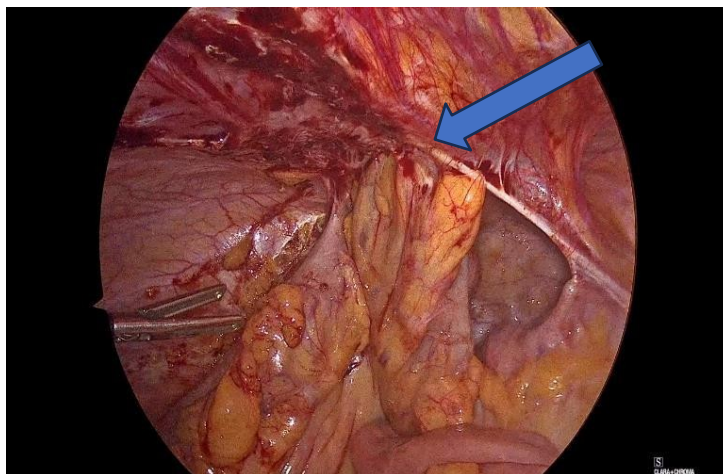


Figure 3. Intraoperatively seen tumor invading the sigmoid colon, part of urinary bladder and the rectus muscle (arrow).

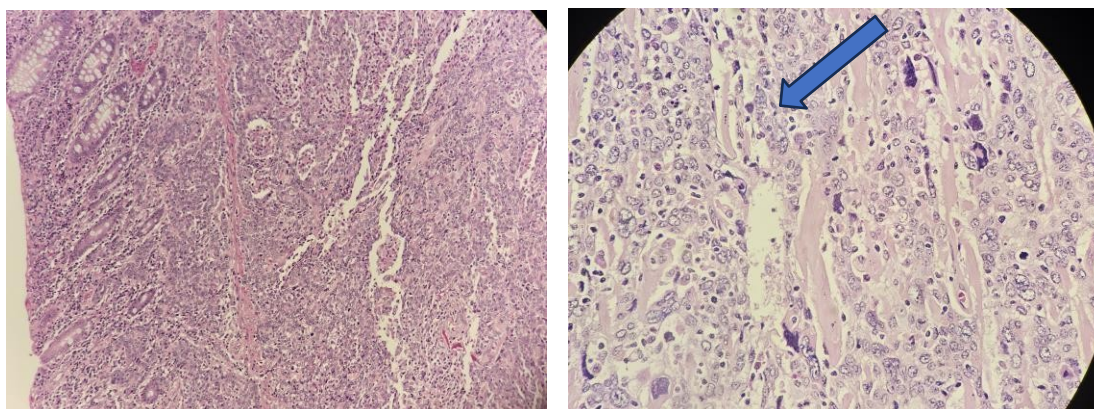


Figure 4. Sections show sheets of markedly pleomorphic undifferentiated tumor cells with coarse chromatin and few bizarre nuclei and atypical mitotic activity

Considering the recent surgical history of the patient and pathological findings of the tumor, there's a suspicion of a sigmoid metastasis from cervical cancer. Currently undergoing chemotherapy, she is responding well, highlighting the importance of ongoing treatment and regular monitoring for her overall health and progress.

Discussion

Cervical cancer, a prevalent gynecological malignancy with high incidence and mortality, particularly in developing nations, has witnessed a significant reduction in occurrence and mortality globally due to the introduction of Human papillomavirus vaccines and early detection methods such as Pap smears. Adaptation of the liquid-based cytology, and other diagnostic tests targeting early detection of human papillomavirus also significantly reduced cervical cancer-related deaths [3]. Recurrences predominantly manifest in the pelvic region, with distant metastases affecting various sites such as the lungs (37.9%), bone (16.7%), gastrointestinal tract (14%), liver (12.5%), brain (1.6%), and other atypical locations like the skeletal muscle, skin, thumb, spleen, kidney and oral cavity [5]. Notably rare are metastases to the colonic region, particularly in the sigmoid colon, with only a few reported cases, some being isolated incidents [7–9]. This rarity may be attributed to the shorter length of intestinal segments in this area [6]. The small bowel despite constituting a major length of the bowel has reported less incidence of malignancies due to a few protective mechanisms like 1) mucosal mediated immune action and rapid epithelium turnover, 2) less mucosal inflammation or injury by liquid nature of the chyme. Metastases to the small intestine typically occur through lymphatics to the bowel serosa. But

less frequently, intraperitoneal dissemination, direct invasion and bloodstream may also occur[3,4] . The challenge

posed by distant metastases is substantial, given limited therapeutic options and a poor prognosis. Calculations reveal a 10-year incidence of distant metastases at 3% when the tumor is confined to the cervix with microscopic invasion (stage IA), 16% when the tumor invasion is more than 5millimetre (stage IB), 31% when tumor invasion is limited to the upper 2/3rd of the vagina with no parametrial involvement. (stage IIA), 26% for with parametrial involvement with lateral pelvic wall spared(stage IIB), 39% when the tumor invades the pelvic wall, kidney or para-aortic lymph nodes (stage III), and 75% when the tumor spreads beyond the true pelvis (stage IV)[5]. Particularly in the context of gastrointestinal tracts, the primary focal resection of cervical carcinoma, is often difficult due to direct contact of the bowel to mesenteric deposits thereby hampering favorable surgical outcomes. Our report details a unique case of recurrence at the pelvis confining only to a segment of the sigmoid colon, successfully addressed through sigmoid resection to ensure negative surgical margins. The descending colon and rectosigmoid sufficient redundancy facilitated a tension-free primary anastomosis, eliminating the need for ostomy creation.

Considering the circumstances and the surgeons' judgment, we deemed a minimally invasive procedure without supplementary lymph node sampling during the recurrence as the preferred option to mitigate intraoperative and postoperative complications. Additionally, the patient had undergone sentinel node mapping in her initial surgery. Despite sentinel node mapping in cervical cancer being a topic under investigation, it has garnered growing endorsement in scholarly literature, indicating its potential as a strategy to circumvent complete nodal dissection while precisely detecting nodal metastases[6–8]. Past data indicates that minimally invasive surgical methods, encompassing both traditional laparoscopy and robot-assisted laparoscopy, are linked to reduced blood loss, shorter hospital stays, and fewer postoperative complications[9,10]. Consequently, the patient opted for a laparoscopic radical hysterectomy, salpingo-oophorectomy, bilateral pelvic lymphadenectomy, and para-aortic lymph node sampling.

Therefore, in addition to routine HPV testing and cervical cytology for detecting issues in the vaginal stump, CT or MRI scans are recommended in specific scenarios, especially when high pelvic lymph nodes are implicated, to evaluate distant recurrence[11]. The presence of metastatic tumors in the small bowel and sigmoid part of the colon generally signifies a grim prognosis, accompanied by common clinical manifestations such as bleeding, obstruction, and nonspecific symptoms like abdominal discomfort, bloating, and vomiting[3,12]. When intestinal metastases are suspected, procedures such as contrast-enhanced computer tomography, endoscopy, and exploratory laparotomy should be contemplated. Characteristic features of intestinal metastases often include increased intestinal wall thickness and rigidity, submucosal spread, and ulcers. Laparotomy is frequently the preferred choice for physically fit patients, and chemotherapy can be considered as a palliative treatment option[13].

Conclusion

In conclusion, managing cervical carcinoma, especially the squamous cell variant, remains challenging despite curative options like radical hysterectomy or chemoradiation therapy. Recurrence affects 30% of patients within two years, often involving lung and paraaortic nodes, with rare metastasis to sites like the sigmoid colon. Our case highlights the need for vigilant monitoring and multidisciplinary management due to the unique challenges of isolated metastasis. Extensive surgical intervention was necessary for isolated recurrence in the sigmoid colon, demonstrating the complexity of such cases. Continued research into metastatic mechanisms and targeted therapies is crucial for improving outcomes, particularly for challenging recurrence patterns.

References:

1. Fagundes H, Perez CA, Grigsby PW, Lockett MA: Distant metastases after irradiation alone in carcinoma of the uterine cervix. *International Journal of Radiation Oncology*Biology*Physics*. 1992, 24:197–204. 10.1016/0360-3016(92)90671-4
2. Estape RE, Angioli R, Madrigal M, Janicek M, Gomez C, Penalver M, Averette H: Close vaginal margins as a prognostic factor after radical hysterectomy. *Gynecol Oncol*. 1998, 68:229–32. 10.1006/GYNO.1998.4960
3. Kanthan R, Senger JL, Diudea D, Kanthan S: A review of duodenal metastases from squamous cell carcinoma of the cervix presenting as an upper gastrointestinal bleed. *World J Surg Oncol*. 2011, 9:. 10.1186/1477-7819-9-113
4. Gurian L, Ireland K, Petty W, Katon R: Carcinoma of the cervix involving the duodenum: case report and review of the literature. *J Clin Gastroenterol*. 1981, 3:291–4. 10.1097/00004836-198109000-00015
5. Liu YM, Ni LQ, Wang SS, Lv QL, Chen WJ, Ying SP: Outcome and prognostic factors in cervical cancer
6. patients treated with surgery and concurrent chemoradiotherapy: a retrospective study. *World J Surg Oncol*. 2018, 16:. 10.1186/S12957-017-1307-0
7. Selman TJ, Mann C, Zamora J, Appleyard TL, Khan K: Diagnostic accuracy of tests for lymph node status in primary cervical cancer: a systematic review and meta-analysis. *CMAJ*. 2008, 178:855–62. 10.1503/CMAJ.071124
8. Cormier B, Diaz JP, Shih K, et al.: Establishing a sentinel lymph node mapping algorithm for the treatment of early cervical cancer. *Gynecol Oncol*. 2011, 122:275–80. 10.1016/J.YGYNO.2011.04.023
9. Cibula D, Abu-Rustum NR, Dusek L, et al.: Bilateral ultrastaging of sentinel lymph node in cervical cancer: Lowering the false-negative rate and improving the detection of micrometastasis. *Gynecol Oncol*. 2012, 127:462–

10. 6. 10.1016/J.YGYNO.2012.08.035
11. Basaran D, Leita MM: THE LANDMARK SERIES: MINIMALLY INVASIVE SURGERY FOR CERVICAL CANCER. *Ann Surg Oncol*. 2021, 28:204. 10.1245/S10434-020-09265-0
12. Ramirez PT, Frumovitz M, Pareja R, et al.: Minimally Invasive versus Abdominal Radical Hysterectomy for Cervical Cancer. *N Engl J Med*. 2018, 379:1895–904. 10.1056/NEJMOA1806395
13. Bhatla N, Aoki D, Sharma DN, Sankaranarayanan R: Cancer of the cervix uteri: 2021 update. *Int J Gynaecol Obstet*. 2021, 155 Suppl 1:28–44. 10.1002/IJGO.13865
14. Singhal A, Masood S, Mahajan C, Hadi R, Bhalla S: Gastric and colonic metastasis from cancer cervix: An unusual progression with an uncommon cause of mortality. *South Asian J Cancer*. 2015, 4:51. 10.4103/2278-330X.149959
15. Yu X, Wang Z, Zhang Z, Liu Y, Huang J: Postoperation of cervical cancer with intestine metastasis: a case report and literature review. *World J Surg Oncol*. 2016, 14:. 10.1186/S12957-015-0759-3