

Recurrent Pelvic Abscess - Is It A Cause of Concern

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Type of Publication: Case Report

Conflicts of Interest: Nil

Abstract

The common aetiology of pelvic abscess include pelvic inflammatory disease, acute appendicitis, abdominal and gynaecological surgeries. One of the rare causes was colorectal malignancies. A 37 year old sterilised female presented with recurrent pelvic abscess, multiple uterine fibroids and a right complex ovarian cyst. Laparotomy was done. Intra-operatively dense adhesions were noted between posterior uterine wall and large bowel. Recto sigmoid area was densely adherent to the uterine wall and the region was ischemic and friable. Hence meticulous dissection was done and Hartman's procedure was done. The resected bowel sent for histopathological examination and report showed moderately differentiated adenocarcinoma of sigmoid colon and inflammatory changes in uterus, tubes and ovaries. Patient is now on adjuvant chemotherapy and regular follow up. In a post tubal sterilised patient with recurrent pelvic abscess, she should also be evaluated for other non-infectious and non-gynaecological causes.

Keywords: Recurrent pelvic abscess, colorectal malignancy.

Introduction

Pelvic abscess is commonly caused by pelvic inflammatory disease, acute appendicitis, abdominal surgeries, crohn's disease, diverticulitis and bowel injury secondary to gynaecological surgeries. One of the rarest causes is colorectal malignancies. Tubal occlusion is

found to offer some protection against pelvic inflammatory disease. Since 1975, 71 cases of salpingitis and 38 cases of tubo-ovarian abscess in sterilized women have been published ⁽¹⁾. Hence these patients should be evaluated specifically for non-infectious and non-gynaecological etiology ⁽²⁾.

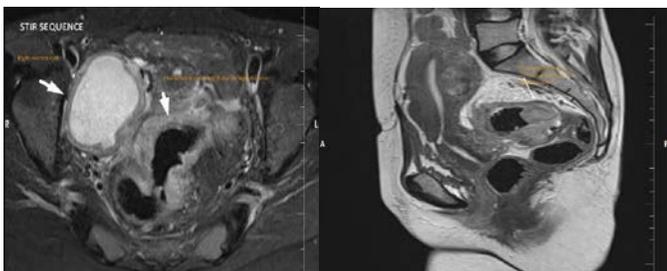
Case Report

A 37 year old female, presented to the consulting room with complaints lower abdominal pain for 3 months and fever for two days. Abdominal pain was intermittent colicky, not radiating and no specific aggravating and relieving factors. She had low grade intermittent fever, not associated with chills and rigors for the past two days. Bladder and bowel habits are normal. Her menstrual cycle are regular and her obstetric history was P1L3A2(Sterilized) delivered 14 years ago by caesarean section in view of triplet and sterilized 2 years later. No familial history of malignancy.

On clinical examination she was febrile, irritable and tachycardic. Local examination of the abdomen revealed a firm, mobile, tender mass of size 5 x 6 cm was palpable over the supra pubic region. Per vaginal examination revealed forniceal tenderness. Digital rectal examination was normal. Routine blood investigations done which revealed severe anaemia (Hb-7 g/dl). Transvaginal ultra sound showed right complex ovarian cyst with multiple uterine fibroids. Initially, She was managed conservatively. Two units of packed cells were transfused.

Contrast enhanced computed tomography (CECT) of whole abdomen was done in view of persistent pain and fever spikes, which revealed pelvic abscess with right complex ovarian cyst with multiple uterine fibroids. Emergency colpotomy was done and Pus culture sensitivity was sent which revealed growth of klebsiella pneumoniae and patient was treated with appropriate antibiotics based on pus culture sensitivity report. Patient was symptomatically better and discharged. Patient was readmitted after 2 months with persistent lower abdomen pain. Magnetic resonance imaging (MRI) of whole abdomen was done which showed multiple uterine fibroids with right complex ovarian cyst, and an asymmetrical thickening in the rectosigmoid region with dense adhesions between the bladder and the uterus (Figure 1 and Figure 2). Tumour markers were sent. Carcino-embryonic antigen (CEA-8.1ng/dl) was alone elevated. Other markers were normal.

Figures (1 and 2)



Treatment

Patient was planned for laparotomy. In view of anticipated adhesions bilateral Double J (DJ) stenting was done. Intraoperatively peritoneal cavity was filled with foul smelling multiloculated pus collections (approximately 200-300ml) which was drained and sent for culture sensitivity. Right ovarian cystectomy was done and sent for frozen section which turned out to be benign. Total abdominal hysterectomy was proceeded. Dense adhesions were noted between the posterior uterine wall and large bowel. Adhesiolysis was done. Rectosigmoid

region was ischaemic, friable and pus filled. Meticulous dissection was done. Surgeons help was obtained and Hartman's procedure was done. The resected specimen was sent for Histopathology examination and report revealed moderately differentiated adenocarcinoma grade-II (PT4aN0M1c) and inflammatory changes in the uterus, tubes and ovaries. Patient was referred to medical oncologist and was started on chemotherapy; injection Oxaliplatin and T. Capecitabine, currently on 5th cycle of chemotherapy.

Discussion

Apart from common etiologies of pelvic abscess, some of the rare causes like colorectal malignancy should be suspected, especially in sterilized women (since its incidence is rare among them)⁽¹⁾ and also in post-menopausal women. In post-menopausal women presenting with tubo-ovarian abscess, gynaecological malignancy is the first cause of suspicion, Gastrointestinal malignancies are also to be suspected⁽³⁾. Patients presenting with intra and retro peritoneal abscess should be suspected for Gastrointestinal malignancies irrespective of the age, especially if there is a positive family history of the same. Joy Anderson et al have reported a case of 40 year old sterilised female presenting with tubo ovarian abscess which was intraoperatively diagnosed to be secondary to colorectal malignancy⁽²⁾. Incidence of perforation in Carcinoma colon is 2-13%^(4,5). In 3.3% of colorectal carcinomas, the presenting complaint is perforation. Among them 61% present with localised perforation with abscess formation. 39% cause disseminated infection⁽⁶⁾. The cause of perforation is due to necrosis of stercoral ulcer. It can also be due to pressure proximal to an obstructing lesion⁽⁷⁾. General or localised extracolonic spread is more common with neoplasm than with inflammatory condition⁽⁸⁾. Hence recurrent abscess formation should provoke the suspicion of malignancy

rather than inflammation⁽⁹⁾. DDT Maglinite et al have presented 3 cases of adenocarcinoma of the colon. All of them presented with fever and flank pain; CT finding showed para renal abscess in one case and retroperitoneal abscess in other two. All 3 were diagnosed intraoperatively⁽⁹⁾ Peterson et al have presented a case of carcinoma sigmoid colon which presented as iliopsoas abscess⁽¹⁰⁾. Hence all cases need a thorough pre-operative evaluation. Both conventional CT and MRI imaging have an unacceptably low accuracy for identifying the early stage primary colorectal cancer⁽¹¹⁾. Among the 6 reliable tumour markers for colorectal cancer, it is recommended that CEA levels measured pre-operatively would change the surgical management.

Conclusion

Pelvic inflammatory disease is the commonest cause of pelvic abscess, recurrent pelvic abscess especially in a sterilized patient is a rarity. Recurrent pelvic abscess in a post tubal sterilized patient, should be evaluated specifically for non infectious and non gynaecological etiology including colorectal cancer. Radiological studies can be misleading and surgical exploration should be strongly considered for accurate diagnosis and management of such cases.

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Acknowledgements

1. Dr. Vijithra- Contributed in Pre-operative evaluation, assisted the case and post-operative follow up
2. Dr. Swetha gulabi- Primary surgeon.

How to citation this article: T. Vijithra, G. Swetha Gulabi, "Recurrent Pelvic Abscess - Is It a Cause of Concern", *IJMACR*- July- August - 2020, Vol – 3, Issue - 4, P. No. 135 – 138.

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