



SMALL BOWEL METASTASIS FROM LEIOMYOSARCOMA OF CERVIX- A CASE REPORT

General Surgery

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KEYWORDS

Leiomyosarcoma account for 1 to 2 % of all uterine and cervical malignancies. Although commonly believed to arise from benign leiomyoma for most part they don't. Instead they appear to develop denova as solitary lesions which shows aggressive growth pattern and rapid disease progression with high propensity of hematogenous dissemination particularly lungs. We report an original case of acute intestinal perforation in a 37 year old female due to leiomyosarcoma of cervix. 37 year old female presented to the emergency room with abdominal distension, obstipation and vomiting for 2 days. Per abdomen showed diffuse peritonitis with vague mass in hypogastrium, right and left iliac fossa. CXR- showed air under diaphragm. Pt recently diagnosed with leiomyosarcoma of cervix for which she underwent Total abdominal hysterectomy with bilateral salpingoopherectomy 2 months back. Due to persistent abdominal pain on and off she took PET scan one month back which showed tumour recurrence in vaginal stump with infiltration in anterior abdominal wall and rectosigmoid junction with omental deposits and pulmonary mets and she was on palliative chemotherapy. We did emergency laparotomy which had tumour growth infiltrating the ileum causing perforation. We did resection of the ileal segment with end ileostomy. Specificity with leiomyosarcoma to receive correct preoperative diagnosis is only 25 to 50% and diagnosis is mostly made postoperatively and the treatment options include surveillance only, reoperation, radiotherapy, chemotherapy. Generally these options are less straightforward and largely due to rarity of the tumours and comparatively limited data supporting one strategy over another.

Case Report

37 year female came with abdominal distension, vomiting, obstipation for 2 days. She is a known case of secondary infertility for which she underwent endometrial curettage which showed endometrial stromal tumour. She underwent Total abdominal hysterectomy with bilateral salpingoopherectomy on August 2023 and histopathology report came as High grade leiomyosarcoma of cervical growth with uterus showed adenomatous hyperplasia with normal ovaries and fallopian tubes. She had persistent abdominal pain for 1 month. She took PET scan which showed tumour recurrence in vaginal stump of size 13.8*9.5*11cm with infiltration of anterior abdominal wall with infiltration of rectosigmoid junction with omental deposits in right paracolic gutter of size 7.8*6.3*8.7cm with pulmonary metastasis and planned for palliative chemotherapy. Her BP was 100/70 mm hg and PR was 120 and SpO2 was 94% in RA. Per abdomen examination showed distended abdomen with vague mass in right iliac fossa, hypogastrium and left iliac fossa with diffuse tenderness in all quadrants with Diffuse Guarding in all quadrants. Per vaginal examination showed vague mass in vaginal vault with vaginal vault tenderness. Per rectum examination showed collapsed rectum. CECT taken which showed pneumoperitoneum with small bowel perforation with tumour infiltration -? Metastasis. She underwent emergency laparotomy which showed ileoileal intussusception with gangrenous perforation of the segment with tumour growth around the gangrenous segment with distended proximal small bowel loops. We did emergency laparotomy with resection of gangrenous segment with proximal ileostomy with distal mucous fistula. Histopathology report came as metastatic deposits from leiomyosarcoma with malignant neoplasm infiltrating the mucosa, submucosa, muscularis propria and serosa. The neoplastic cells are arranged in long fascicles and bundles

and sheets. The cells are spindle shaped and oval having moderate eosinophilic cytoplasm with pleomorphic nuclei and nucleoli. The cells exhibit marked atypia with atypical mitosis of more than 10/10 Hpf. Resected ends are free from tumour infiltration. IHC study positive for smooth muscle Desmin and actin in 90% of tumour cell. Patient succumbed to death on POD#16 due to respiratory failure due to lung metastasis.

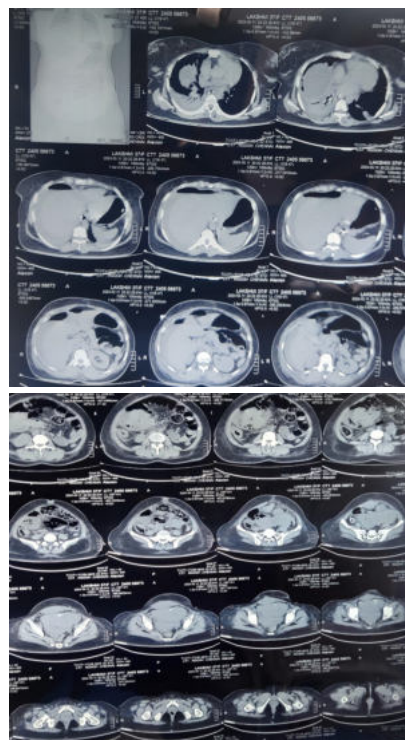


Figure 1 And Figure 2: CECT showing pneumoperitoneum with small bowel perforation due to tumour infiltration, P/S/O of Metastasis.



Figure 3: Resected specimen of ileoileal intussusception which has the gangrenous perforation of the segment with tumour growth around the gangrenous sement.

DISCUSSION:

Sarcomas account for 3-8% of all malignancy of uterine corpus of which leiomyosarcoma contribute to 40 % of the cases . Rest are carcinosarcoma, endometrial stromal tumour, undifferentiated sarcoma. Risk factors include increased estrogen exposure, tamoxifen use, prior pelvic radiation and African american race. Oral contraceptives and smoking found to be protective. Leiomyosarcoma have a monoclonal origin. Although commonly believed to arise from benign leiomyoma for most part they don't. Instead they develop denova as solitary lesions. Generally the tumours show aggressive growth pattern, rapid disease progression with high propensity to hematogenous dissemination particularly to lungs. Symptoms and signs include abnormal vaginal bleeding and profuse foul smelling discharge with pelvic pain with rapid enlargement of uterus .Sensitivity of an office endometrial biopsy or dilatation and curettage to detect sarcomatous elements is lower than that of endometrial carcinomas. Inability to accurately sample the tumour is probably related to their origin from myometrium rather than endometrium. Histological criteria to diagnose leiomyosarcoma is based on the frequency of mitotic figures, extent of nuclear atypia and the presence of coagulative tumour necrosis. CA-125 is raised and used to predict prognosis CT abdomen used to make the diagnosis. MRI abdomen differentiate uterine sarcoma from a benign mimic. PET scan is useful for recurrent uterine sarcoma. Specificity with leiomyosarcoma to receive correct preoperative diagnosis is only 25 to 50% and diagnoses is mostly made postoperatively and the treatment options include surveillance only, reoperation, radiotherapy, chemotherapy. If diagnosis is made preoperatively , Based on FIGO classification for Stage 1 and Stage 2 Leiomyosarcoma the treatment option is staging laparotomy, and if resectable proceed with Radical or modified radical hysterectomy with lymph node dissection followed by adjuvant chemotherapy or adjuvant radiotherapy. Stage 3 and Stage 4 disease need cytoreductive surgery followed by adjuvant chemotherapy or adjuvant radiotherapy. The chemo therapeutic agents are Doxorubicin , Doxorubicin + Ifosfamide, Gemcitabine + docetaxel + bevacizumab. Raditherapeutic options include External beam radiotherapy and brachytherapy. Generally these options are less straightforward and largely due to rarity of the tumours and comparatively limited data supporting one strategy over another.

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