Case Report

A rare association of uterine leiomyoma with mesenteric vein thrombosis and bowel gangrene: case report

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Received: 05 February 2021
Revised: 09 March 2021
Accepted: 10 March 2021

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ABSTRACT

Uterine fibroids are the most common benign pelvic tumors in women. There are many complications reported with fibroids. However, mesenteric vein thrombosis and small bowel gangrene caused by a uterine fibroid are rare. This manuscript reports a rare case of 40 year female with a large uterine fibroid associated with mesenteric vein thrombosis and bowel ischemia. She underwent exploratory laparotomy in which resection of gangrenous bowel including jejunum and ileum was done along with left sided jejunostomy and right sided ileostomy. Total abdominal hysterectomy with bilateral salpingooophorectomy was done followed by jejunoileal anastomosis 6 weeks later. Hence, in patients presenting with acute abdomen and uterine fibroids, bowel gangrene must be included in the differential diagnosis.

Keywords: Uterine leiomyoma, Acute abdomen, Portal vein thrombosis, Superior mesenteric vein thrombosis, Bowel gangrene, Case report

INTRODUCTION

Uterine fibroids (i.e. leiomyomata) are common benign smooth muscle tumors of the uterus. Most women will develop one or more uterine fibroids during their reproductive lifespan.¹

Uterine leiomyomas are the most common pelvic tumors in women and occur in 20-30% of women over 30 years of age.² The fibroid may lead to various complications which include torsion, urinary retention, hemorrhage and thromboembolism. Thrombosis and subsequent embolic phenomenon due to large uterine fibroids is rarely reported complication. Here, we present a case report of large uterine leiomyoma causing portal vein, superior mesenteric vein thrombosis accompanied by bowel ischemia.

CASE REPORT

40 years female, homemaker, para 2, live 2, sterilized presented to emergency department with complaint of abnormal uterine bleeding since 5 days along with breathlessness and easy fatigability. She had complained of irregular menstrual cycles along with menorrhagia since last 6 months. This was her first ever visit to the hospital with the aforesaid complaint. She was admitted for evaluation of abnormal uterine bleeding in the ward. At night, she developed sudden onset of abdominal pain and hypotension.

Her past medical history revealed no history of chronic diseases, no usage of oral contraceptive pills. She has no recent travel history and was not taking any medications. There was no family history of any thrombotic disorder.
She was clinically very pale and overweight (BMI – 28.6 kg/m²). Her physical examination showed temperature of 98 degree fahrenheit, blood pressure (BP)=90/50 mmHg, tachypnea (respiratory rate-30/min), tachycardia (heart rate=130 bpm). Per abdominal examination revealed firm, irregular, mobile mass arising from the pelvis, corresponding in size to a pregnant uterus of 20-22 weeks. Diffuse tenderness over abdomen was present.

Laboratory analysis showed hemoglobin of 6.4 gm/dl with thrombocytosis (platelet count–5.2 lakh/ and normal serum electrolytes. D-dimer was found to be elevated (610 ng/ml). Transabdominal ultrasound revealed a large fibroid in the posterior uterine wall measuring 13x11x10 cm. There were features suggestive of portal vein thrombosis and superior mesenteric vein thrombosis. Also edematous bowel loops were seen with interbowel collection.

Contrast enhanced computed tomography (CECT) abdomen and pelvis revealed a large segment filling defect noted in the superior mesenteric vein suggestive of thrombosis. Similarly, filling defects were also noted in the portal vein and splenic vein suggestive of thrombosis. There was a large, well defined homogenous hypodense enhancing soft tissue density lesion of size 14.2x11.4x9.8 cm along the posterior wall suggestive of uterine fibroid. Jejunal loops and proximal ileal loops appeared thickened and edematous with significantly reduced enhancement. These bowel loops appeared dilated with maximum dilatation of 4.2 cm. Thus, the provisional working diagnosis was bowel gangrene secondary to mesenteric vein thrombus with uterine fibroid.

Echocardiogram showed normal cardiac chamber dimensions, preserved systolic function, no pulmonary hypertension (pulmonary artery systolic pressure=28 mmHg) and a normal left ventricular ejection fraction (68%).

The patient was immediately taken for exploratory laparotomy with blood on flow. Written consent was taken for explorative surgery of the abdomen with the possibility of performing a hysterectomy. The patient was induced with spinal anesthesia and remained stable during the whole operation. Resection of gangrenous bowel including jejunum and ileum was done along with left sided jejunostomy and right sided ileostomy. Bowel resection included segment 30 cm away from duodenojejunal junction up to 20 cm of ileum proximally. Total abdominal hysterectomy with bilateral salpingooophorectomy was done.

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