Atypical Clinical Manifestations in Uterine Myoma: A Case of a 46-Year-Old Woman with Abortus History

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Abstract
Uterine myoma, also known as uterine fibroids or leiomyomas, represents one of the most common benign gynecological tumors worldwide. Recent epidemiological data reveal that in 2019, approximately 9.64 million new cases of uterine myoma were diagnosed globally. The clinical presentation of uterine myoma varies depending on its severity, ranging from completely asymptomatic cases discovered incidentally to severely symptomatic presentations that significantly impair quality of life. Heavy menstrual bleeding represents the most common clinical manifestation across multiple studies. This study underlines the importance of recognizing the signs and symptoms of uterine myoma, especially in asymptomatic and atypical cases in women diagnosed with uterine myoma. A case of uterine myoma came from a 46-year-old woman (P1A1) with atypical clinical manifestations such as acute nausea-vomiting and left lower abdominal pain. There was a palpable suprapubic mass measuring approximately 6x5 cm, immobile, and tenderness in the left inguinal region. The laboratory tests revealed anemia, leucocytosis, descrease kidney function. There was also hematuria, leucocyteuria and bacteriuria in urinary test. USG showed an enlarged uterus with a slightly hyperechoic lesion with fairly clear boundaries, oval in shape, measuring 5.92 x 5.24 x 6.96 cm in the corpus and fundus areas, accompanied by increased intralesional vascularity with Doppler examination. The patient was undergo undergo laparotomy hysterectomy et salpingoophorectomy sinistra.

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Abstrak
Mioma uterus, juga dikenal sebagai fibroid uterus atau leiomioma, merupakan salah satu tumor ginekologi jinak yang paling umum di seluruh dunia. Data epidemiologi terbaru mengungkapkan bahwa pada tahun 2019, sekitar 9,64 juta kasus baru mioma uterus didiagnosis secara global. Presentasi klinis mioma uterus bervariasi tergantung pada tingkat keparahannya, mulai dari kasus yang sepenuhnya asimtomatik yang ditemukan secara kebetulan hingga presentasi simptomatik yang parah yang secara signifikan mengganggu kualitas hidup. Perdarahan menstruasi yang berat merupakan manifestasi klinis yang paling umum di berbagai penelitian. Penelitian ini menggarisbawahi pentingnya mengenali tanda dan gejala mioma uterus, terutama pada kasus asimtomatik dan atipikal pada wanita yang didiagnosis dengan mioma uterus. Sebuah kasus mioma uterus berasal dari seorang wanita berusia 46 tahun (P1A1) dengan manifestasi klinis atipikal seperti mual-muntah akut dan nyeri perut kiri bawah. Ada massa suprapubik yang teraba berukuran sekitar 6x5 cm, tidak bergerak, dan nyeri tekan di daerah inguinal kiri. Pemeriksaan laboratorium menunjukkan anemia, leukositosis, dan penurunan fungsi ginjal. Terdapat pula hematuria, leukosituria, dan bakteriuria pada pemeriksaan urin. Ultrasonografi menunjukkan uterus yang membesar dengan lesi sedikit hiperekoik berbatas tegas, berbentuk oval, berukuran 5,92 x 5,24 x 6,96 cm di area korpus dan fundus, disertai peningkatan vaskularisasi intralesi dengan pemeriksaan Doppler. Pasien menjalani laparotomi histerektomi dan salpingooforektomi kiri.

I. INTRODUCTION

Uterine myoma, also known as uterine fibroids or leiomyomas, represents one of the most common benign gynecological tumors worldwide. The global burden of uterine myoma has shown a concerning upward trend, with worldwide incidence rates increasing by 6.87% from 225.67 per 100,000 in 1990 to 241.18 per 100,000 in 2019 (Li et al., 2023). Recent epidemiological data reveal that in 2019, approximately 9.64 million new cases of uterine myoma were diagnosed globally, representing a

substantial 67.07% increase from 5.77 million cases in 1990 (Lou et al., 2023). Around 20-25% of women of reproductive age and 30-40% of women over 40 years old have myomas (Sparic et al., 2015).

The prevalence of uterine myoma varies significantly based on diagnostic methods employed, with studies reporting rates ranging from 5.4-77% depending on the population studied and detection techniques utilized (Sparic et al., 2015). Among Eastern European nations, Latvia has the highest age-standardized incidence rate (667.14 per 100,000 women), followed by the Russian Federation and Ukraine with 586.64 per 100,000 and 578.21 per 100,000, respectively. On the other hand, Australia and New Zealand have the lowest incidence rates, with 86.13 per 100,000 population and 81.98 per 100,000, respectively (Li et al., 2023).

In Indonesia, uterine myoma represents a significant gynecological health concern, with prevalence rates ranging from 2.39% to 11.7% among all gynecological inpatients, positioning it as the second most common gynecological condition after cervical cancer (Saifuddin et al., 2010). Research conducted at Dr. Hasan Sadikin General Hospital in Bandung revealed that the incidence of uterine myoma in the hospital’s annual report is approximately 6.43-12.46% (Ilma et al., 2015), with specific risk factors including age, parity, and body mass index showing significant correlations (Ilma et al., 2015; Martina et al., 2018). Other risk factors, such as family history, also influence myoma occurrence in Indonesian populations (Martina et al., 2018).

The clinical presentation of uterine myoma demonstrates remarkable diversity, ranging from completely asymptomatic cases discovered incidentally to severely symptomatic presentations that significantly impair quality of life. Heavy menstrual bleeding represents the most common clinical manifestation across multiple studies. A Spanish study of symptomatic uterine myoma patients found that 86.6% experienced heavy menstrual bleeding (Monleon et al., 2018). Other research found that women with uterine myomas had several histories, such as 73.4% heavy menstrual bleeding previously, 74.9% menstrual pelvic pain, 68.4% lower back pain, and 68.3% anemia or fatigue (Fuldeore et al., 2017). Other history symptoms, such as pelvic pressure (22.4%), constipation, bloating, or diarrhea, were experienced by 63.3% of women with uterine myomas (Fuldeore et al., 2017).

Meanwhile, a comprehensive Japanese study involving 3,682 healthy women found that 39.2% had asymptomatic uterine fibroids detected on routine transvaginal ultrasound (Satou et al., 2025). This study underlines the importance of recognizing the signs and symptoms of uterine myoma, especially in asymptomatic and atypical cases in women diagnosed with uterine myoma.

II. METHOD

A 46-year-old woman came to the emergency room of KRMT Wongsonegoro Regional Hospital due to a referral from other hospital. The patient's main complaint was nausea and vomiting for the past 1 day. The patient also complained of lower left abdominal pain for the past 1 year, which has worsened over the past 2 months. For the past 1 day, the patient complained of nausea and vomiting containing water and food eaten with a frequency of 10 times per day. The patient stated that the nausea and vomiting appeared suddenly. Meanwhile, the patient's complaint of lower left abdominal pain has been intermittent (VAS 5/10) since 1 year ago. However, for the past 2 months, the pain experienced was continuous, improved by rest and worsened by activity or the first day of menstruation. The patient said the pain sometimes radiated to the waist (VAS 7/10).

The patient experienced menarche at the age of 12, regular menstrual cycles every 28 days, and the duration of each menstruation is 3-5 days. The patient changes sanitary napkins 4-5 times per day during each menstruation and experiences moderate-severe pain (VAS 6/10) only on the first day of menstruation. The patient's obstetric history is P1A1. The patient's first pregnancy did not result in a child because the patient had a miscarriage in 2002, so a curettage was performed at Dr. Dradjat Prawiranegara Serang Regional Hospital, Banten. The patient gave birth to her first child in 2003 spontaneously vaginally, assisted by a midwife in Pati. The baby was full-term with a birth weight of 2800 grams, cried immediately, and there were no complications during pregnancy or delivery. The patient admitted to regularly taking birth control pills since 2003 (after giving birth to her first child) and stopped taking birth control pills in 2015.

The complaints about frequently eating late and a preference for spicy and sour foods, as well as tea and coffee were denied. Headaches and a

history of previous head trauma were denied. Complaints of bleeding and black stools were denied. Complaints of fever, painful urination, difficulty urinating, and gritty urine were denied. A history of previous catheter use was denied. Smoking and alcohol consumption were denied. A history of similar complaints was denied. A history of diabetes mellitus, hypertension, and malignancy was denied. A history of similar complaints in the family was denied. Allergies were denied. The patient has a history of frequently holding in urine.

The current physical examination revealed a moderately ill general condition and vital signs within normal limits. Based on the Indonesian Ministry of Health's BMI classification, the patient's nutritional status is overweight (BMI = 25.23 kg/m^2). An abdominal examination revealed a slightly convex but supple abdomen, with a palpable suprapubic mass measuring approximately 6x5 cm, immobile, and tenderness in the left inguinal region. Bowel sounds were normal. A gynecological examination revealed no abnormalities.

Laboratory tests revealed anemia (Hb 11.3 g/dL), accompanied by leukocytosis (22.500/µL) and decreased kidney function (urea 69 mg/dL, creatinine 1.92 mg/dL). Urine tests revealed leukocyturia, hematuria, and bacteruria.

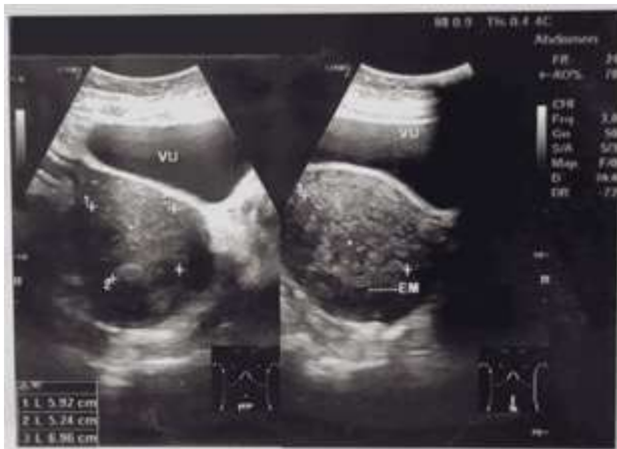

Figure 1. Ultrasound Examination

The results of an ultrasound examination (USG) of the uterus showed an enlarged uterus with a slightly hyperechoic lesion with fairly clear boundaries, oval in shape, measuring 5.92 x 5.24 x 6.96 cm in the corpus and fundus areas, accompanied by increased intralesional vascularity with Doppler examination (Figure 1).

The patient was suspected of having uterine myoma in the corpus and fundus area in the anterior aspect, renal insufficiency dd/AKI, and asymptomatic UTI. The patient was given treatment in the form of 0.9% NaCl solution 8 tpm, omeprazole inj 2x40 mg, ceftriaxone inj 2x1 gram, ketorolac inj 1x30 mg if abdominal pain, mecobalamin inj 1x500 mg, sucralfate suspension 4x10 cc, and folic acid PO 1x1 mg. The patient was advised to fast and was planned to undergo laparotomy hysterectomy et salpingoophorectomy sinistra. The patient was treated together with an internal medicine specialist.

After laparotomy hysterectomy et salpingoophorectomy sinistra, a histopathological examination of the submitted tissue was performed. The histopathological examination revealed chronic cervicitis with nabothian cysts, a proliferative phase of the endometrium, a uterine leiomyoma with adenomyosis, and a mature cystic teratoma with a ovarian follicular cyst sinistra.

III. RESULT AND DISCUSSION

Benign monoclonal tumors called uterine myomas develop from the smooth muscle cells in the myometrium. In contrast to normal myometrium, fibroids are hormonally sensitive tumors that overexpress progesterone and estrogen receptors. Progesterone and estradiol both encourage the formation of fibroid tissue (Barjon et al., 2025; Kilpatrick, 2025). Fibroids are categorized according to their location. There are three types of uterine fibroids: submucosal, intramural, and sub-serosal. FIGO categorizes uterine myomas into nine categories (Munro et al., 2011; Palheta et al., 2023; Kilpatrick, 2025).

Although the precise cause is still unknown, risk factors that are currently known to enhance the development of uterine myoma include African descent, age >40 years, nulliparity, early menarche (<10 years old), familial history, obesity, and hypertension (Barjon et al., 2025; Cruz & Buchanan, 2017). Ilma et al. revealed that the risk of uterine myoma increases with increasing BMI, including 0.89-fold and 1.19-fold at BMI 23.7-28.3 and 28.4-33.0, respectively. Meanwhile, BMI >33.0 carries a 1.69-fold higher risk of developing uterine myoma (Ilma et al., 2015). The risk factors that the patient in this case had for developing uterine myoma included age >40 years and overweight.

The patient's presentation demonstrates the characteristic symptom progression of uterine fibroids, with chronic pelvic pain evolving into acute gastrointestinal symptoms. The one-year history of intermittent lower left abdominal pain

(VAS 5/10) that intensified over two months, particularly during menstruation, aligns with typical fibroid symptomatology. Multiple studies revealed women with uterine myomas have symptoms like irregular uterine bleeding (most common), pelvic pain and pressure, anemia, bladder or bowel problems, and dyspareunia even though many fibroids are asymptomatic (Barjon et al., 2025; Cruz & Buchanan, 2017; Fuldeore et al., 2017).

While the acute onset of nausea and vomiting (10 times per day) associated with uterine fibroids is relatively uncommon, it can occur through several mechanisms. Large fibroids may cause constipation by compressing adjacent organs, leading to gastrointestinal symptoms including nausea. Additionally, the significant anemia present in this patient secondary to chronic blood loss from fibroids can contribute to nausea and dizziness. The rapid onset of symptoms in this case suggests possible fibroid degeneration or torsion of a pedunculated fibroid, both of which can present with acute abdominal pain and nausea (Georgia Fibroids, 2024).

The patient's urinalysis revealing leukocyturia, hematuria, and bacteruria in the context of a large uterine myoma represents a well-recognized complication pattern. Uterine fibroids can enlarge and compress the urinary bladder, urethra, and lower end of the ureters, leading to incomplete bladder emptying and urinary stasis. When fibroids prevent complete bladder emptying, the residual urine creates an ideal environment for bacterial growth, significantly increasing urinary tract infection (UTI) risk (Dagur et al., 2016). This mechanism is particularly relevant in this patient, who reports a history of frequently holding in urine, which compounds the risk of urinary stasis and infection.

The constellation of UTI and renal insufficiency (creatinine 1.92 mg/dL, urea 69 mg/dL) in this patient represents a serious complication sequence. The UTI may represent either a contributing factor to acute kidney injury through ascending pyelonephritis or a consequence of urinary stasis from mechanical obstruction. Large fibroids can cause obstructive uropathy through direct ureteral compression, leading to hydronephrosis and subsequent renal dysfunction (Fletcher et al., 2013). According to Amisu et al., 10.5% of individuals with uterine leiomyomata have obstructive nephropathy. The development of obstructive nephropathy was positively correlated with both uterine size and myoma diameter (Amisu et al., 2024).

Diagnostic evaluation typically begins with a thorough history and pelvic examination, where enlarged uteri or palpable masses may be detected. However, imaging studies are essential for confirming the diagnosis and characterizing fibroid characteristics. The first imaging modality that is advised for the diagnosis of uterine myoma is ultrasound. The ultrasound findings of an enlarged uterus with a hyperechoic lesion measuring 5.92 x 5.24 x 6.96 cm in the corpus and fundus areas, accompanied by increased intralesional vascularity on Doppler examination, are consistent with a significant uterine fibroid in this patient. The size and location of this fibroid likely contribute to the patient's bulk-related symptoms and mechanical compression effects (Cruz & Buchanan, 2017; Jacobson et al., 2019).

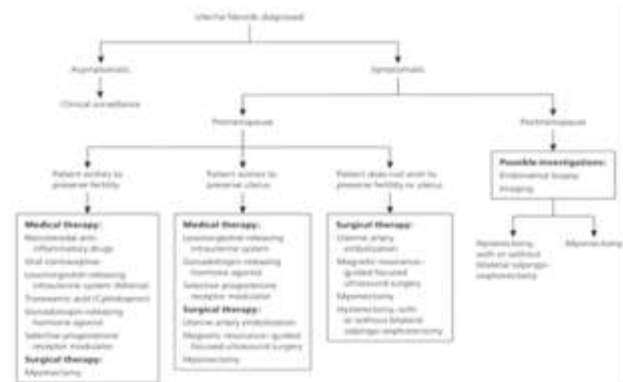

Figure 1. Uterine Myoma Management Algorithm (Cruz & Buchanan, 2017)

The decision to proceed with total hysterectomy and left salpingo-oophorectomy represents appropriate definitive management for this patient among many other management options for uterine myoma (Figure 2). Current guidelines support hysterectomy as the most effective treatment for symptomatic fibroids in women who have completed childbearing (ACOG, 2021; Vilos et al., 2015; Cruz & Buchanan, 2017). At 46 years of age with a P1A1 obstetric history and no desire for future fertility, the patient meets standard criteria for definitive surgical management.

The choice of total hysterectomy over myomectomy is justified by several factors: the patient's age, completed family, presence of concurrent adenomyosis, and the size and location of the myoma. Myomectomy would carry risks of recurrence (15-30% at 5 years) and would not address the adenomyosis component,

which likely contributed significantly to her symptoms (Cruz & Buchanan, 2017). The concurrent removal of the left adnexa was necessary due to the presence of mature cystic teratoma and follicular cyst.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

This case demonstrates that uterine fibroids can present with complex, multisystem manifestations requiring comprehensive evaluation and multidisciplinary management. The development of acute kidney injury and urinary tract infection in association with symptomatic fibroids underscores the importance of recognizing and promptly addressing potential complications beyond the primary gynecological pathology. The planned surgical intervention represents appropriate definitive management for this patient's condition, with expected resolution of both the primary fibroid symptoms and secondary complications.

B. Suggestion

The discussion in this study is still limited. A more comprehensive, in-depth study of atypical clinical manifestations in uterine myomas is urgently needed as a suggestion for future authors.

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