Self-inflicted chronic laparoscopic wounds in endometriosis—unveiling major depressive disorder: a case report

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To our knowledge, there are no reported cases in literature of adolescents with endometriosis with major depressive disorder that manifested as chronic laparoscopic wounds. Major depressive disorder in patients with endometriosis is a common occurrence, but self-directed violence is rare. We present the case of an adolescent female with chronic pelvic pain who was treated with medical management that proved ineffective. She then underwent laparoscopic excision of endometriosis. After surgery, she continued to experience oozing of a brown colored discharge from the primary umbilical port site, and it became a chronic nonhealing wound with associated pelvic pain. Four months later, she underwent re-exploration of the umbilical wound and laparoscopy. Subsequently, she had multiple and frequent hospital visits including ward admissions. The laparoscopic wounds remained as flesh wounds for 11 months despite multidisciplinary treatment, including care from a plastic surgeon. Patient was seen by a psychiatrist and a diagnosis of major depressive disorder was made. She was started on antidepressants, and subsequently, the wounds healed. This case report discussed a young adolescent female who underwent surgical treatment for endometriosis but who presented with a cryptic manifestation of major depressive disorder- chronic postlaparoscopic wounds. This case illustrates the need for early recognition of nonreproductive complications of endometriosis and timely multidisciplinary involvement.

Key words: adolescent, chronic post laparoscopy wounds, endometriosis, major depressive disorder

Introduction

Endometriosis is a chronic disease that is characterized by the presence of endometrium-like epithelium with or without stroma outside the endometrium.[1] The true prevalence of endometriosis is not known but it is estimated to affect 50% to 60% of teenage girls with pelvic pain.[2] Chronic pelvic pain is the most common presentation, and it affects all aspects of daily living. Presentation may be protean with symptoms such as dysmenorrhea, chronic noncyclic pelvic pain, urinary or bowel related pain and/or bleeding, infertility, and dyspareunia.[1,3,4] These symptoms reduce productivity, cause an impaired quality of life, may affect personal relationships, and influence sexual function. It is a complex disease that requires a multidisciplinary approach for its management.

Studies done in the past to evaluate the effect of endometriosis on mental health have had inconsistent findings. Different studies have consistently shown that >50% of patients with endometriosis have moderate to severe emotional disorder. There are few previous studies that have evaluated the effect of endometriosis on mental health in adolescents.

In this case report, we present a unique case of an adolescent girl who presented with major depressive disorder that manifested as chronic postlaparoscopic wounds that only resolved after treatment with antidepressants.

Case presentation

This was a case of a 17-year-old adolescent girl in the final year of secondary school with a 3-year history of abdominal pain and umbilical discharge. The abdominal pain was cyclical before becoming constant and interfering with her academic and extracurricular activities. Her medical history included empirical treatment for peritoneal tuberculosis at a different facility without improvement. An esophagogastroduodenoscopy was conducted and showed resolving gastric nodularity, and a colonoscopy showed bloody stools. She was finally referred to a gynecology specialist 3 years after symptom onset with chronic pelvic pain that worsened during her menses. The pain began in the premenstrual period and persisted after her menses. She had no associated urine symptoms but had blood-stained stools during her menses. Her menarche occurred at 12 years of age. She had regular menses with 26- to 28-day cycles with a normal flow for 3 days. During abdominal examination it was discovered that she had a subcentimeter umbilical nodule with brown colored discharge. She had suprapubic and umbilical tenderness. A pelvic ultrasonography scan and magnetic resonance imaging were performed and were reported as normal. She was initially treated with a progestin only pill; however, there was no improvement in the pain or umbilical discharge.

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The patient and her parents were counseled about a diagnostic laparoscopy with possible endometriosis treatment to which they consented. She underwent a laparoscopy and excision of endometriotic lesions (red lesions seen on the left and right pelvic side wall and over the right pararectal space). A 2 cm umbilical nodule that involved the rectus sheath and that was adjoined to the umbilical skin was also excised. The patient was discharged home on analgesics. The patient was readmitted twice after the primary surgery with pain and bloody discharge from the laparoscopic ports. The patient was re-admitted a week after surgery with pain and dark brown discharge from the umbilical port. During the second admission, she was started on dienogest, which provided minimal symptom relief and was subsequently discontinued.

Approximately 4 months later, because of worsening pain, she underwent a repeat laparoscopic surgery. She was found to have sigmoid adhesions to the anterior abdominal wall, left pelvic side wall endometriosis over the ureter, and right ureteric and uterosacral endometriosis, along with umbilical nodular fibrosis. She had extensive pelvic dissection, including pararectal dissection and excision of the pelvic peritoneum and the endometriotic nodules. The umbilical nodule was excised, and the suprapubic port was explored. The patient recovered well postoperatively and was discharged.

However, she experienced multiple readmissions, sometimes a month or 2 apart, for persistent abdominal pain and nonhealing laparoscopic port sites, which had a blood-stained discharge. A plastic surgeon reviewed her and treated the port sites with hydrocolloid dressing. These flesh wounds on the port sites persisted for approximately 11 months.

The patient exhibited a flat affect during all her admissions at the hospital and had consistently low moods. Counselling and mental health support was suggested multiple times. During one of her admissions to the hospital, she agreed to a psychology consult. She expressed concern about her inability to participate in extracurricular activities at school. She felt alienated from her schoolmates because of frequent hospital visits and lacked a true connection with her parents. She also revealed that she had engaged in self-cutting with a sharp blade as a means of coping with abdominal pain. In addition, she was worried about her final year examinations.

She was suspected of self-harm by scratching the port sites, which she denied. A psychiatrist evaluated her and diagnosed her with major depressive disorder. She was started on fluoxetine and aprazolam. Remarkably, her depressive symptoms improved and the laparoscopic wounds that had persisted for 11 months healed completely.

As a final year student, she was able to complete her final high school examinations and proceeded to college. The patient is currently on treatment with Mirena and leuprolide with add-back therapy initiated after wound resolution.

Discussion

The rate of self-directed violence among women with endometriosis is 0.9 per 1000 person-years.[5] Self-harm is a manifestation of major depressive disorder. Depressive mood disorders occur more frequently in patients with endometriosis than in those without it.[6] Mental health conditions associated with endometriosis include anxiety, depression, posttraumatic stress disorder, and eating disorders.

Chronic pain can contribute to self-harm through multiple pathways, including neuroinflammation and central sensitization that leads to a lower pain threshold and psychological distress.[7] These play a role in the heightened nociceptive sensitization and amplification of pain perception, which alters brain function and increases the risk for major depressive disorder among other mental health conditions.[7]

This patient had a unique presentation of major depressive disorder, namely chronic postlaparoscopic wounds. The patient experienced a delayed diagnosis despite presenting with chronic abdominal pain and umbilical discharge. For 3 years, she was treated by different specialists without a definitive diagnosis, a factor that significantly impacts mental health.[3]

A delay in diagnosis is a potential causal factor in the development of mental disorders in adolescent patients. Clinicians should maintain a high index of suspicion for mental disorders in patients who experienced a delay in diagnosis. In addition to that, once a diagnosis is made and they understand that their disease is chronic, they tend to have greater social dysfunction than patients with pain of unknown origin.

Progestins, such as dienogest, have also been linked to mood disorders. Patients should be evaluated for mood disorders before prescribing these medications and informed on the potential side effects.[8] Clinicians should refer patients for psychological support both before and after interventions. Family therapy should also be considered.

This is a case report of a patient who presented with chronic postlaparoscopic scars following surgical intervention. The wounds constantly had discharge and required regular dressing. For scar endometriosis, the pain and discharge would likely be cyclical and more pronounced during her menses. Her risk profile for poor mental health included delayed diagnosis, chronic pelvic pain, repeat surgery, and multiple admissions that disrupted her daily life—both her social and academic life. Psychological support and psychiatrist involvement should continually be offered to patients to avert or manage anxiety and depressive and mood disorders.

Self-directed violence, which may take on several forms of self-harm, is a red flag that necessitates referral for psychological support and even psychiatric care. In this case, persistent laparoscopic wounds caused by continuous scratching were a warning sign, however, the patient denied scratching them. Notably, the wounds healed only after psychiatric intervention and initiation of antidepressant therapy.

This case highlights a unique presentation of major depressive disorder:, namely chronic self-inflicted laparoscopic wounds. The patient had other

manifestations of major depressive disorder, including low mood, lack of interest in previous activities, insomnia, and self-cutting. However, her recurrent complaints of chronic painful laparoscopic wounds masked the psychiatric complication of endometriosis. Given that the chronic laparoscopic wounds healed after starting antidepressants is proof that self-harm was a manifestation of major depressive disorder.

Conclusion

Mental health complications that arise as a consequence of endometriosis in adolescents remain understudied. Many patients with endometriosis develop depressive or anxiety disorders because of chronic pelvic pain. This case highlights the need for early mental health support to reduce the risk of self-harm. Clinicians should be vigilant when patients present with chronic laparoscopic wounds after surgery, because these may indicate self-harm. Although rare, self-inflicted injuries in endometriosis patients with depression warrant urgent attention. Chronic postlaparoscopy wounds represent a unique presentation of major depressive disorder, highlighting the importance of early multidisciplinary care. ■

CRediT authorship contribution statement

Maryanne Mwangi: Writing – review & editing, Writing – original draft, Validation, Formal analysis, Conceptualization. **Charles Muteshi:** Writing – review & editing, Writing – original draft, Supervision, Formal analysis.

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