PRIMARY UMBILICAL ENDOMETRIOSIS CONSERVATIVE MANAGEMENT: A RARE CASE

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ABSTRACT

Background: Endometriosis is a progressive and systemic disease defined as the presence of endometrial tissue outside the uterine cavity. Endometriosis is mainly located in the pelvic region but can present outside the pelvic region in areas such as the intestinal tract, lungs, thoracic, and surgical scars. Umbilical endometriosis commonly occurs in patients who have undergone laparoscopic surgery for endometriosis, but primary umbilical endometriosis is considered a very rare case in patients without a history of surgery. Objective: This case report presents the possible mechanism of primary umbilical endometriosis and its management options. Method: Case Report Results: A P1A0 33-year-old woman came to the outpatient clinic with a slowly growing nodule in her umbilicus. The lesion will bleed and swell every time she gets her period. The symptom has occurred for approximately one year. She has never undergone any operation in her life. Her menstruation histories are unremarkable. We found a blackish firm nodule of 20x20mm in size from inspection and palpation. The patient was not ready for surgery to excise the nodule. She decided to undergo conservative treatment for her umbilical endometriosis. We gave her 2mg progestin medication a day for three months. The nodule seems to be shrinking after three months of treatment. Conclusions: Primary umbilical endometriosis is a scarce type of endometriosis, and progestin medication can be used as a conservative treatment in primary umbilical endometriosis.

Keywords: primary, umbilical, endometriosis, rare

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INTRODUCTION

Endometriosis is a progressive and systemic disease defined as the presence of endometrial tissue outside the uterine cavity. Endometriosis is mainly located in the pelvic region, but it can present outside the pelvic region in areas such as the intestinal tract, lungs, thoracic, and surgical scars.[1] Umbilical endometriosis commonly occurs in patients who have undergone laparoscopic surgery for endometriosis, but primary umbilical endometriosis is considered a very rare case in patients without a history of surgery. Umbilical endometriosis is a form of cutaneous endometriosis with a relatively rare incidence, at around 1%. At the same time, cases of primary umbilical endometriosis have a more negligible incidence, less than 1%.[2] Primary umbilical endometriosis is cutaneous endometriosis without a history of previous surgery. The exact cause of

primary umbilical endometriosis is still unclear, but several theories of endometriosis pathogenesis can explain the occurrence of primary umbilical endometriosis. One theory that can explain primary umbilical endometriosis is the lymphatic drainage theory. In contrast, another theory is metaplasia of the uracus remnant, which then turns into endometriosis tissue due to the influence of inflammation.[3,4]

CASE

A P1A0 33-year-old woman came to the outpatient clinic with a slowly growing nodule in her umbilicus. The lesion will bleed and swell every time she gets her period. The symptom has occurred for approximately one year. She has never undergone any operation in her life. Her menstruation histories are unremarkable. No cyclical pain was recorded during her period. We found a blackish firm nodule of 20x20mm in size from inspection and palpation. We found no abnormality from the ultrasound. The uterus is retroflexed, measuring 7,1 x 4,4 x 3 cm. The endometrial line is present. Both adnexas are in good condition, and no abnormalities are found. The cavum of Douglas is not obliterated. The patient was not ready for surgery to excise the nodule. She decided to undergo conservative treatment for her umbilical endometriosis. We gave her 2mg dienogest a day for three months continuously. After three months of treatment, the nodule has shrunk, and the cyclical pain and bleeding have been resolved. We still offered her to undergo resection of the umbilical endometriosis lesion for definitive treatment, but she refused to undergo any operation.

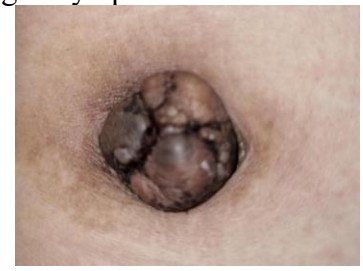

Figure 1. Macroscopic appearance of Umbilical Endometriosis

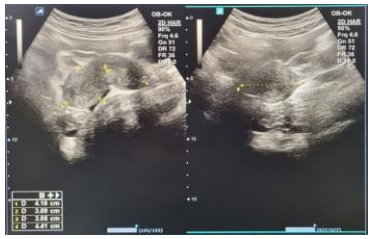

Figure 2. Ultrasound findings

DISCUSSION

Primary umbilical endometriosis is one form of cutaneous endometriosis. The incidence of cutaneous endometriosis cases is quite rare, and has only been reported around 1% and is usually associated with surgical scars. Primary umbilical endometriosis, defined as the presence of cutaneous endometriosis without a history of previous surgery, has an even lower incidence than cutaneous endometriosis. Until now, the cause and pathophysiology are still unclear, but several theories explain how endometrial tissue migrates from the uterus to the skin. Several theories explain the pathogenesis of endometriosis, such as the retrograde menstruation theory, the theory of coelomic metaplasia and Mullerianosis, hormonal changes, oxidative stress and inflammation, suppression of apoptosis, genetics, and stem cells. Several theories of the spread of endometriosis include direct spread, iatrogenic dissemination including surgical dissemination, and lymphatic or hematogenous spread.[5] Of all the theories that have been put forward about endometriosis, primary umbilical endometriosis is caused by the lymphatic theory, which states that lymphatic channels join the peritoneum along obliterated umbilical vessels.[6] Moreover, hematogenous spread is associated with coexisting pelvic endometriosis. The second theory that can explain primary umbilical endometriosis is due to metaplasia of the urachus remnant, which turns into endometriosis tissue through inflammation.[3,7]According to Calagna et al. The inflammation of the tissues around the endometriotic pelvic implant might stimulate the discharge of endometriotic cells, which could travel via the venous vessels to the umbilicus.[7]

In this case, we diagnosed primary umbilical endometriosis because the patient had no history of previous surgery, and there were lesions in the umbilicus that were firm, cyclical pain, and cyclical umbilical bleeding every time she menstruated. The patient has no cyclical pelvic pain during her period; thus, we suspect that this patient has isolated umbilical endometriosis. But in order to ensure this, we should do transvaginal ultrasound and MRI to detect deep infiltrating endometriosis with more sensitivity and specificity.[1] The patient chose not to have surgery due to her complaints. We chose an empirical approach by giving continuous progestin therapy to overcome the patient's complaints and suppress the growth of umbilical endometriosis. This approach is supported by Rosina et al. and Bagade et al., who provide hormonal therapy to reduce symptoms and the size of the nodule in the umbilicus.[8,9] However, we still offer surgery for definitive treatment to prevent recurrency of the lesion. Hirata et.al. proposed recommendations for the treatment of extragenital endometriosis and advocated for radical surgery with wide local excision as the main approach for umbilical endometriosis. They highly advise surgical excision but acknowledge the limited evidence supporting it, mainly due to uncertainty regarding its long-term effectiveness and potential complications.[10]

CONCLUSION

Primary umbilical endometriosis is a very rare type of endometriosis. The possible mechanism that can explain the pathogenesis of primary umbilical endometriosis are lymphatic drainage theory and metaplasia of the uracus remnant. The progestin medication can be used as a conservative treatment in primary umbilical endometriosis.

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