CASE REPORT

An Inguinal Lump, Please Put an Endometriosis Extra Pelvic on Your Diagnosis List : Cases Series of Deep Endometriosis

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ABSTRACT

Deep Endometriosis is usually found in the ovaries, peritoneum, gynecological organs and in the pouch of Douglas. We have reported 5 rare cases of extra-pelvic endometriosis from 2018-2023 on a patient who had endometriosis surgery and suffered from a mass in her inguinal area, and the symptoms were going up and down along with the menstrual cycle. An unclear mass which was hard and elastic in the right side of inguinal area with an average diameter of 22.2 cm2 at the bottom edge of the rectus abdominal muscle. The patient was then given 2mm Dienogest therapy for 180 days and the mass tended to enlarge so that it was decided to undergo surgery. The rare incidence of DE at inguinal is one of the considerations as a differential diagnosis for painful inguinal hernias. Collaboration and multidisciplinary approach are needed to understand better and to find appropriate therapy to prevent a recurrence.
Malaysian Journal of Medicine and Health Sciences (2025) 21(4): 399-401. doi:10.47836/mjmhs.21.4.50

Keywords: Deep endometriosis, Inguinal lump, Inguinal endometriosis, Inguinal hernia, Multidisciplinary

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INTRODUCTION

Deep Endometriosis (DE) is a benign pathological disorder of functional endometrial tissue that grows on the outer side of the uterine cavity. (1) Endometriosis commonly happens in intrapelvic structures such as the uterus, fallopian tubes, ovaries, pelvic peritoneum, and pouch of Douglas.(2) Lumps in the inguinal area are often not associated with gynecological disorders, which is why doctors often miss the diagnosis of DE . The occurrence of DE in subcutaneous areas that are not on the route of surgical access is infrequent, and there are cases that show similar symptoms to soft tissue tumors.(1-2)

We made a report on rare cases series of DE in which tissue grew on the right side of inguinal area that resembled a soft tissue tumor or inguinal hernia in a post-operative endometriosis patient who had been undergoing 2 mg daily dienogest therapy for 180 days at Anugerah Women & Children Hospital Semarang (RSIA).

CASE REPORT

From 2018-2023, there were 5 cases of women aged 36 years with a history of laparoscopic cystectomy due to endometriosis 3 years ago and they received 2 mg dienogest therapy orally, every day for 1 year after surgery . Of these 5 cases, 2 patients were unmarried and 3 married patients had infertility. Initially, all patients felt pain and mass in their right inguinal area. The local doctor's initial examination stated that the patients were suffering from thrombophlebitis and they were treated with NSAIDs and antibiotics. Because the pain was gradually increasing and the size of the period was getting bigger, especially during menstruation, the patients visited to our hospital.

We found a hard and inelastic mass in the right inguinal area. The diameter of the masses varies from the largest being 4x3x3 cm and the smallest being 3x2x2 cm, all of which have poor mobility. Ultrasound examination of the pelvic and pelvic area is within normal limits. Imaging using a General Electric S10® high definition ultrasound taken during menstruation reveals a mass, a mean mass volume of 22.2 cm3 in the subcutaneous tissue in front of the pubic ramus of the right superior. This mass also shows iso-signal intensity with areas of partial high signal intensity with uneven edges and tight

adhesion to the surrounding tissue, the impression of a desmoid mass, or other soft tissue tumor.

We treat 2 mg Diengoest therapy daily for 3 months, then we did ultrasound examintaion after 3 month therapy . It is found that the mass does not get smaller, in fact in 4 out of 5 cases it even gets bigger, although it is not significant (p>0.001). Statistically, it is not significant, but it increases in size within 3 months even though therapy has been given (Figure 1). Based on the enlargement of the mass, we perform surgery inguinal excision using ERBE VIOs® electrocautery with spinal anesthesia in the operating room. The hard but elastic tumor is located in the subcutaneous tissue (Figure 2). Macroscopically, ribbon-like structures in the specimens are observed. We enucleated the wide-margin mass, considering cases of malignancy and recurrence due to endometriosis.

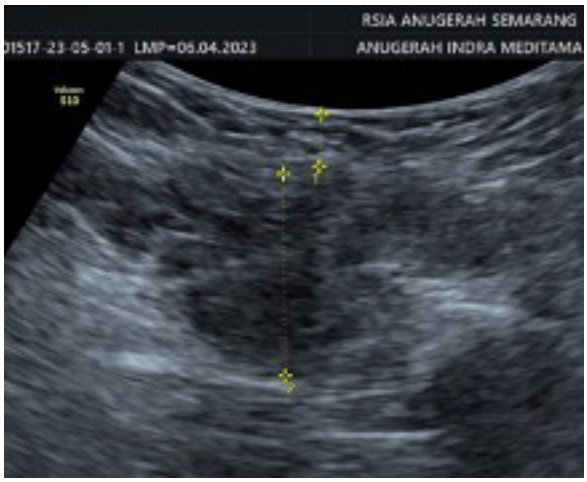

Figure 1: Ultrasound finding an iso-signal intensity with areas of partial high signal intensity with uneven edges and tight adhesion to the surrounding tissue.

Figure 2: The hard but elastic tumor is located in the subcutaneous tissue ribbon-like structures in the specimens being enucleated

The patient was treated at Anugerah Women and Children Hospital Semarang, having a differential diagnosis suffering from right inguinal lump. Accompanied by a digestive surgeon, a surgeon made an incision in the inguinal canal located on the external oblique aponeurosis to get an opening of the superficial ring at its apex. It was then revealing a form of cystic, bluish mass, the average volume was 25.8 cm^3, stuck on the round ligament and it was filled with dark fluid. Histological examination showed glandular structures which consisted of cylindrical epithelium within dense connective tissue; these epithelia showed mild nuclear atypia, and they were positive for estrogen (Figure 3). The diagnosis of endometriosis was confirmed microscopically. The patient was able to go home the next day without any problems or complications.

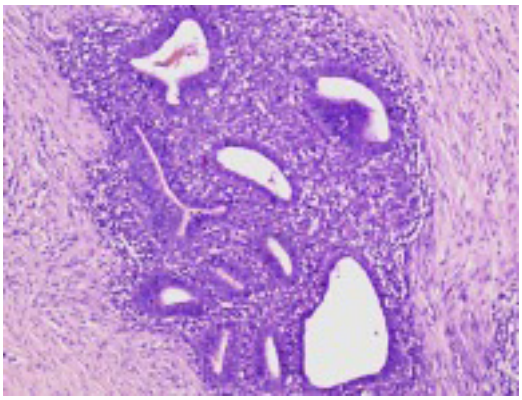

Figure 3: Histological examination with Hematoxylin Eosin smear, visible endometrial stroma and glands in the fibrocollagen stroma (100x magnification)

After surgery, we compared that, before surgery the pain intensity and the tenderness increased constantly during menstruation, and after surgery, the patient was free from pain and there was no recurrence 24 months after the surgery.

DISCUSSION

DE is a common gynecological pathology occurring in 10-15% women of reproductive age. Extra-pelvic endometriosis can be found in the ileum, jejunum, pleura, lungs, and peripheral nerves and it can even occur in the pleura (3).

All 5 patients here have never had surgery around the inguinal area. What occurs in the inguinal subcutaneous tissue is rare in DE. Candiani et al stated that the occurence of endometriosis in the inguinal area reached 0.6% in all extrapelvic cases. Bergamini et al stated that the biggest series of endometriosis are in the inguinal area, which were 30 cases. In 27 cases; out of 30 ones, was found on the unilateral side. The right side was two-thirds of cases occured on the round ligament.

Likewise, all lesions in this study were on the right side, and ligament structures were observed in the surgical specimens. Hagiwara et al stated about two cases of subcutaneous inguinal endometriosis which were attached to the round ligament of the uterus. Previous literature stated that there was a continuity on the lesion and the right are of the round ligament of the uterus; but it had nothing to do with an inguinal hernia. Tetsuya

Hirata et all concluded that evidence-based research on both the diagnosis and the treatment of DE is still insufficient, considering the low prevalence and limited quality of research which are available in the literature (4,5).

CONCLUSION

To gain a better understanding about DE, it is recommended to elaborate a record including multidisciplinary collaborations with gynecologists, general surgeons, internal specialist and digestive surgeons . Therefore, these cases report can be used to better understand collaboration and a multidisciplinary approach are important in optimizing patient recovery who seek therapy for DE involving obstetricians as well as general surgeons, digestive surgeons and endocrinologists and need a new alternative therapy that can inhibit inflammatory cytokines in DE .

ACKNOWLEDGEMENT

We thank to all Civitas Hospitalia of Anugerah Women and Children Hospital and all Civitas Academica of Diponegoro University who facilitated this research. We would also like to acknowledge Barkah Fajar Riyadi, Perigrinus Hermin Sebong and Amarwati who have assisted in this study process.

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