Urethral Endometriosis and Infiltrating Sigmoid Mucosal Endometriosis: A Rare External Endometriosis Case Report

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I. Introduction

Endometriosis is one of the most common problems encountered in gynaecology and a chronic condition. It is defined as the presence of endometrial glands and stroma at extrauterine sites. These ectopic endometrial implants are usually located in the pelvis but can occur nearly anywhere in the body and called external endometriosis [1]. The most common sites for external endometriosis are the ovaries, uterosacral ligaments, ovarian fossa, peritoneum of the pouch of Douglas, and rectovaginal septum. It is less frequently found in the cervix, vagina, and vulva and is rare in the urinary tract (bladder and ureter), occurring in only 1-2% of women with symptomatic endometriosis and affecting the bladder [2]. Another condition, intestinal endometriosis is a rare conditions occurring in only 5% to 10% [3].

In endometriosis cases, there is often a delay in establishing the diagnosis, thus delaying the appropriate treatment; such delay usually takes 6-7 years [2]. Endometriosis symptoms can vary from pain, chronic pelvic pain more or less related to menses, dyspareunia and dysuria to infertility, though some women may not show any symptoms [4].

In this article, we report a case of sigmoid endometriosis and urether endometriosis, that a rare acase, in one reproductive woman.

II. Case Presentation

Mrs. SA, a 40 years old patient was referred from urology division after having had a bilateral nephrostomy due to bilateral hydronefrosis due to obstruction suspect by mass suppression. Patient chief complained with dysuria since 1 year ago, and it was getting much worse 1 month before admission, with VAS 3-4. Patient also complained about dysmenorrhea with VAS 6-8, it sometimes made her could not do any daily activities if she had menstruation. Other complaints were chronic pelvic pain outside menstrual period and diskezia with VAS 2-3, but she usually could reduce the pain a little by taking painkillers.

On rectovaginal examination, uterus was enlarged, and left adnexal masses ware palpated, with restrictive mobility.

Figure 1 Ultrasound picture of multiple uterine fibroids, left tubal endometriosis cyst

Transvaginal sonographic (TVS) findings are uterus enteflexed, enlarged size and bumpy, myometrium inhomogen. On posterior and anterior corpus, three hipohyperechoic mass were seen with clear border with sizes 34x30 mm, 21x17 mm, 14x6 mm that corresponds to multiple uterine fibroids Thinned endometrial layer with regular basal based, portio and cervix within normal limit. Sliding test result is negative, suspect adhesion between posterior uterine corpus and rectum.

Right ovarium size is 30x17x26 mm, attached to the uterus. Left ovarium size is 33x19 mm. Medial from the left ovarium, a tubular cystic mass is found, with internal echogenicity and incomplete septa size of 33x19 that corresponds to left tubal endometriosis cyst. Both kidneys correspond to bilateral hydronefrosis.

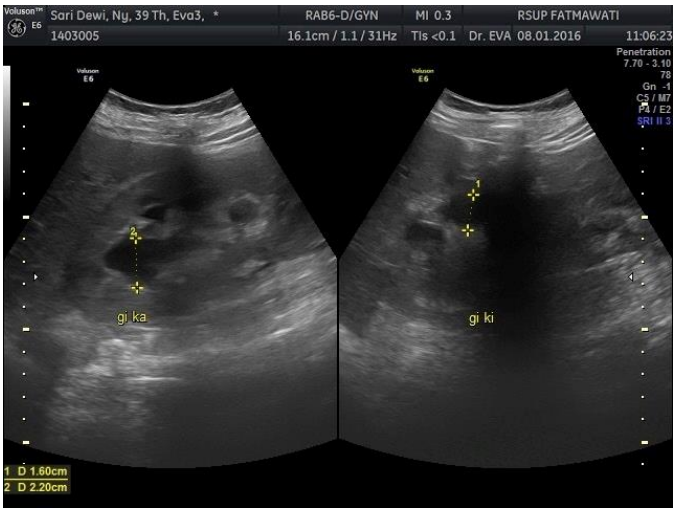

Figure 2 Ultrasound picture of bilateral hydro-nefrosis

Figure 3 MRI findings supect on bowel endometriosis

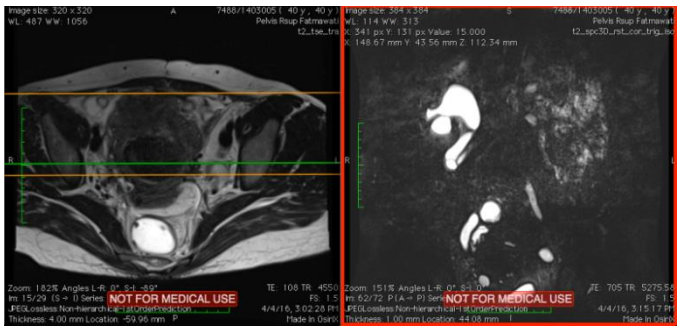

Figure 4 MRI findings suspected right urether endometriosis

On magnetic resonance imaging (MRI), difus adenomyosis on the fundal and anterior corpus uterus is found, with suspicion adhered to infiltrate the bowel wall adjacent to it, suspected bowel DIE. There were hydronefrosis and proximal until distal right hydroureter with microcystic view surrounding distal of the right ureter, showing suspicious deep infiltrating endometriosis.

Patient was anticipated to severe adhesion between bowel and urether tracks, thus surgery was prepared with join operation gynecologic surgeon with digestive surgeon and urologist. Patient then underwent laparotomy.

Intraoperative for the first time was performed by the urologist to insert left catether urether with cystoscopy guiding. But catether urether cannot be inserted to the right one. Then operation continued the gynecologic surgeon, we found nodul at the omentum and massive adhesion between peritoneum and the uterus. An adhesiolysis is performed, during the procedure cyst was ruptured and brown fluid came out which corresponds to endometriosis cyst from the left ovaria. Also, we found enlarged uterus and left hydosalphyng, other right tube and ovarian within normal limit.

We performed total hysterectomy and left salphyngo-ophorectomy. On the next operation, there were narrowing of the lumen of the intestine corresponds with sigmoid endometriosis nodul a sigmoid resection was performed by the digestive surgeon.

And when the urether was identified, we also found narrowing and noduls of the distal right and left urether corresponding to urether endometryosis nodul during the bilateral uretherouretherostomy by the urologist.

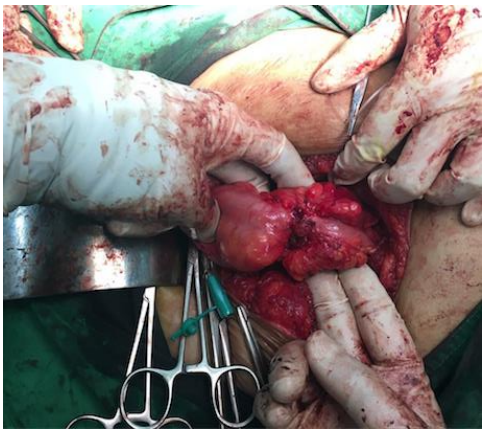

Figure 1 The specimen of the sigmoid endometryosis nodul

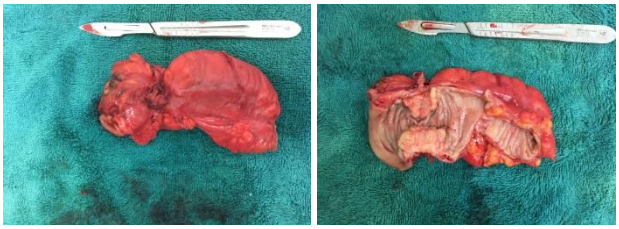

Figure 2 The specimens of the bowel endometryosis nodule

Figure 3 The specimen of the left uretheral endometryosis nodus

Figure 4 The specimens of the right uretheral endometryosis noduls

During the operation, haemodynamic was always stable, and blood loss amount was 1000 cc. Patient was on ambulatory care to endometriosis center policlinic and digestive surgery policlinic. The patient experiences a great improvement regarding pain which she suffered for years before the surgery.

III. DISCUSSION

The possibility of wide spread external endometriosis should be considered in any woman presenting with worsening dysmenorrhea, pelvic pain, dyspareunia, dyskezia or other cyclical symptoms, particularly related to the gastrointestinal or urogenital system. This can be extremely difficult to diagnose preoperatively due to constellation of symptoms and non-availability of specific investigations. Therefore performing *Magnetic Resonance Imaging* (MRI) based examination combined with bimanual and ultrasonography examination for determining the extent of endometriosis and to help preparing a team for operation.

In our patient's case, there were complaints about dysmenorrhea, dyspareunia, dyskezia, chronic non-menstrual pelvic pain, and gastrointestinal symptoms with visual analog scale of pain around 6-7/10, which are correlate with hypothesised mechanism leading to bowel obstruction or ectopic endometrial tissue or implant respond to ovarian hormones on cyclical basis leading to inflammation, fibrosis, and metaplasia or hyperplasia of intestinal smooth muscles that can involve serosa, submucosa and uncommonly mucosa [7]. This point can lead to intussception, volvulus or mechanical kinking of bowel as we believe in our patient.

Based on MRI examination, we found suspected extragenital endometriosis that involves the bowel and the urinary apparatus. However, when it does occur, involvement of the bladder, ureter, kidney and urethra is 85%, 10%, 4%, and 2%, respectively [8]. Ureters are rarely involved in endometriosis; however, the close anatomical proximity of the distal ureter to the female reproductive organs makes it an ideal target for the development of extrinsic compression of the ureter. Pathologic and clinical studies report that most patients showed hydroureter hydronephrosis, with superimposed pyelonephritis in about one third of cases [9]. In this case, patient with hydronephrosis and have had bilateral nephrostomy.

We decided to collaborate our operation with urologist and digestive surgeon and also anesthesiologist as a team based on our finding in the examination.

The choice of treatment depends on different factors, such as the size of the lesion, its location, or the number of tumours. Surgery is considered the treatment of choice for symptomatic endometriosis, though hormonal treatments may provide pain relief in most cases of peritoneal endometriosis. Many surgical modalities have been used for the treatment of these lesions [12].

Surgical procedure was individualized for each patient, but laparoscopic approach was preferred. But in the case of our patient we had performed bowel resections and ureteroureterostomy via laparotomy, due to consideration about the length of the operation time. In the study performed in Finland in 2009, 63% patients required laparotomy, of whom 35% underwent bowel resection.

As it is a rare entity, its evolution and prognosis have been evaluated in small case series, with clinical improvement in most patients [13]. There may be recurrence in up to 56% of cases of pelvic endometriosis. In case of persistence or recurrence of symptoms, segmental bladder resection is indicated [14]. With respect to endocervicosis, no cases of recurrence have been described, despite follow-ups of up to 14 years [15].

Figure 5 Bowel mucous with normal villi, there are two glands and solid stroma equal with endometriosis

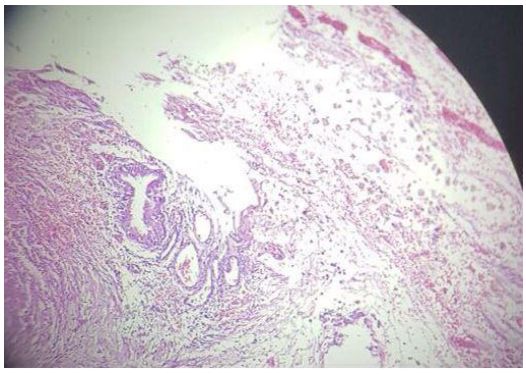

Figure 6 Endometriosis in ureter mucous

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