Clinical Image

Discordance in Histopathological versus Clinical Diagnosis of a Paracolpium Endometrioma – A Diagnostic Challenge

Masahiro Watanabe*

Department of Obstetrics and Gynecology, Hyogo Prefectural Nishinomiya Hospital, Nishinomiya, Japan

A 47-year-old woman was treated as ileus, and incidentally, computed tomography scan found right ovarian cyst diagnosed with endometriotic cyst by magnetic resonance imaging (MRI). Moreover, in the right paravaginal space, there was a round mass whose diameter was 54 mm. MRI revealed the paravaginal mass had multi cysts, which were mid-intensity on T1 imaging, and high- and low-intensity forming fluid level on T2 imaging, with diffusion-weighted imaging-high in some spots [Figure 1].

As the first operation, right salpingo-oophorectomy and left salpingectomy were done laparoscopically, the pathologic diagnosis was "right ovarian endometriotic cyst with strong inflammation." The right paravaginal tumor was left unmanipulated because of the predicted anatomical difficulties. Two years after the first operation, an MRI found that the paravaginal tumor grew 67 mm in diameter and suggested the possibility of malignancy. As second surgery, laparoscopic tumor resection was undergone [Figure 2a]. We excised the dorsal part of the right broad ligament, exfoliated the right ureter, and found the tumor between the uterine cervix and the right ureter. The right deep uterine vein ran from the right to the caudal side of the tumor. We exfoliated the tumor capsule carefully, but because the capsule rigidly adhered to the surrounding tissue, the capsule ruptured by the pressure of a suction tube. Brown inner liquid spilled [Figure 2b]. We excised the tumor border, and then separated the tumor. The pathological diagnosis was "granulation tissue, with strong inflammation" [Figure 3].

One speculation of the origin of this granulation tissue is deep endometriosis at paracolpium. This granulation tissue originally

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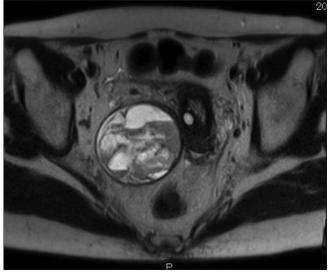


Figure 1: Magnetic resonance imaging image. T2-image: high and low signals in inner cysts

may have been deep endometriosis. It may have experienced inflammation repeatedly and changed into "granulation tissue and inflammatory exudate" more than "endometriotic cysts and bloody endometriotic content." By imaging study, the tumor did not show the typical features of endometriotic cysts (T1-high, T2-shading). There are some reports on fibromuscular differentiation in deep endometriosis. [1,2] This transformation probably made the MRI image of the tumor content "T1-mid, T2-high." There are some previous reports that suggest deep endometriosis presenting as multilocular, heterogeneous retroperitoneal cysts. [3,4]

Address for correspondence: Dr. Masahiro Watanabe, Department of Obstetrics and Gynecology, Hyogo Prefectural Nishinomiya Hospital, Nishinomiya, Japan. E-mail: nabe32@live.jp

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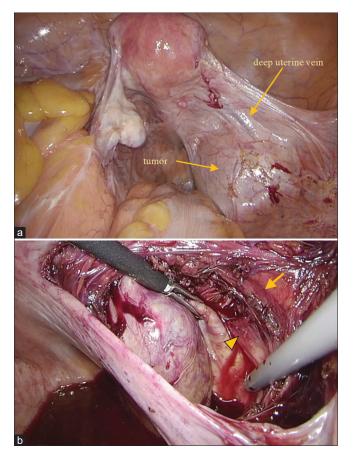


Figure 2: Intraoperative laparoscopic images. (a) At the beginning of the exectomy. The tumor situated at the caudal side of the deep uterine vein. (b) After the tumor ruptured. Inner bloody content spilled. Arrow mark indicates ureter, and the arrowhead indicates deep uterine vein

One of the surgical difficulties of this case was that, at the abdominal and caudal side of this tumor, there would be deep uterine vein, vesical vessels, and pelvic nerve plexus, and at the dorsal side, there would be middle rectal vessels. Second, the tumor was adhesive to adjacent tissue. To carry out operations of deep endometriosis safely, it is mandatory to find and open safe spaces around vital organs such as the ureter, deep uterine vein, pelvic nerve plexus, and other vessels.^[5]

Declaration of patient consent

The authors certifies that he has obtained all appropriate patient consent forms. In the form, the patient has given her

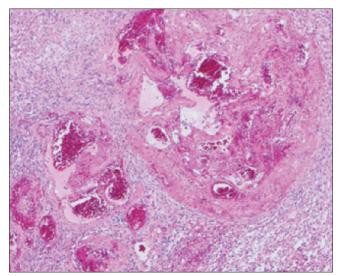


Figure 3: Pathologic image ×40. Blood vessels surrounded by neutrophils, suggesting granulation tissue (H and E)

consent for her images and other clinical information to be reported in the journal. The patient understands that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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