

CLINICAL IMAGE

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A unique case of isolated vulvar endometriosis

Ayesha Aziz Ali, Kelsey Musselman, Marie Smithgall, Kristen Pepin

CASE REPORT

A 40-year-old nulligravida woman with longstanding dysmenorrhea and heavy menstrual bleeding underwent computed tomography (CT) and magnetic resonance imaging (MRI), and alongside findings of uterine fibroids was incidentally found to have a 4.0×1.8×1.6 cm right labial soft tissue structure anterior to the right pubic bone (Figure 1A–C). The patient noted that the mass enlarged during her menses, and her exam revealed a palpable, firm, semi-mobile right vulvar mass slightly adherent to the pubic symphysis with no overlying skin abnormalities or lymphadenopathy. Notably, the patient had an inguinal hernia repair and diagnostic gynecologic laparoscopy performed five years prior during which no endometriosis or fibroids were identified.

The patient underwent laparoscopic myomectomy, hysteroscopic endometrial polypectomy, and vulvar mass resection. To excise the vulvar mass, an incision was made with a scalpel, and extended to the level of the mass with electrosurgery. The mass was grasped with allis clamps, and was carefully separated from surrounding tissue using electrosurgery. The wound was copiously irrigated and then closed in three layers using vicryl suture. The specimen was sent for permanent

pathologic evaluation. Microscopically, the specimen showed fibroadipose tissue containing endometrial stroma and glands with associated chronic inflammation consistent with extensive endometriosis (Figure 2A and B). No other lesions suspicious for endometriosis were identified on laparoscopy (Figure 3A–C). On the patient's post-operative visit, her vulvar incision was noted to be well healed, with no recurrent mass or swelling palpable.

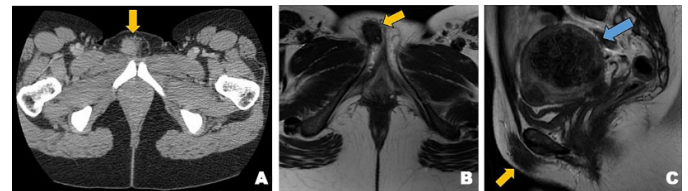


Figure 1: CT and MRI findings. (A) Axial CT with 2 cm soft tissue mass (yellow arrow) anterior to right pubic bone. No enlarged inguinal lymph nodes were identified. (B) T2-weighted axial MRI with ill-defined but mass-like enhancing soft tissue (yellow arrow) in the subcutaneous tissues of the right anterior-superior labia majora and mons pubis measuring 4.0 cm×1.8 cm×1.6 cm. (C) T2-weighted sagittal MRI with labial mass (yellow arrow) and fibroid uterus (blue arrow).

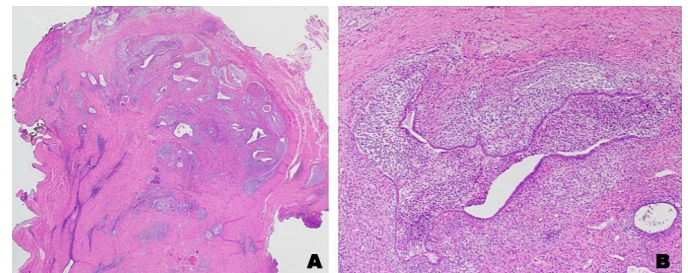


Figure 2: Histologic findings confirming endometriosis. (A) Section of the vulvar mass at low power (2×) shows fibroadipose tissue with extensive endometriosis. (B) High power (10×) shows endometrial stroma and glands within the tissue with associated chronic inflammation.

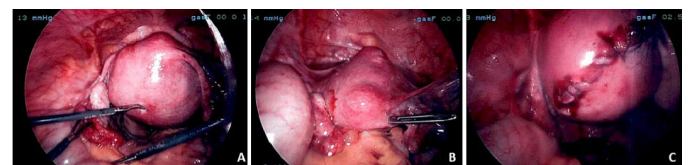


Figure 3: Laparoscopic findings. (A) No endometriosis identified in posterior cul de sac. (B) Uterus with multiple anterior subserosal and intramural fibroids. No anterior cul de sac endometriosis identified. (C) Uterus status post laparoscopic myomectomy.

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Received: 26 May 2022

Accepted: 12 August 2022

Published: 06 September 2022

DISCUSSION

Endometriosis is a gynecologic disease that involves endometrial glands and stroma occurring outside the uterine cavity, with most common sites including the ovaries, anterior and posterior cul-de-sac, posterior broad ligaments, uterosacral ligaments, uterus, fallopian tubes, sigmoid colon, appendix, and round ligaments [1, 2]. Endometriosis of the vulva is extremely rare, often presenting as vulvodynia or dyspareunia. Very few cases have been reported in the literature, and in most of these case reports either concomitant pelvic disease is present or it is undetermined whether more extensive disease is present as laparoscopy was not performed [3–6]. In one systematic review, it was noted that 95.3% of patients presenting with vulvo-perineal endometriosis have undergone either episiotomy, perineal trauma, vaginal injury, or vaginal surgery [7]. In most cases, patients presented with cyclical vulvar pain, and were initially thought to have a Bartholin gland cyst. In three reported cases, during marsupialization of what was thought to be a Bartholin cyst, chocolate colored fluid drained from the mass, and the diagnosis was confirmed by pathology [3, 6, 8]. In all reported cases, surgical excision was the management of choice. In one report, the patient received six months of treatment with a luteinizing hormone releasing hormone analogue with a good evolution [8]. As there are few such cases reported in literature, there is no good data to comment on complication or recurrence rates.

CONCLUSION

Our patient presents with a unique, spontaneous case of isolated vulvar endometriosis unrelated to prior trauma or surgery, with intra-abdominal sites of disease ruled out laparoscopically.

Keywords: Endometriosis, Vulvar endometriosis, Vulvar mass

How to cite this article

Ali AA, Musselman K, Smithgall M, Pepin K. A unique case of isolated vulvar endometriosis. J Case Rep Images Obstet Gynecol 2022;8(2):4–6.

Article ID: 100124Zo8AA2022

doi: 10.5348/100124Zo8AA2022CI

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Acknowledgments

The authors would like to thank Dr. Evelyn Cantillo, MD, MPH, Gynecologic Oncologist and Assistant Professor at New York Presbyterian Hospital/Weill Cornell Medical Center for her diligent care of this patient.

Author Contributions

Ayesha Aziz Ali – Design of the work, Acquisition of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Kelsey Musselman – Design of the work, Acquisition of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Marie Smithgall – Analysis of data, Interpretation of data, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Kristen Pepin – Conception of the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Guarantor of Submission

The corresponding author is the guarantor of submission.

Source of Support

None.

Consent Statement

Written informed consent was obtained from the patient for publication of this article.

Conflict of Interest

The authors declare that they have no conflicts of interest and nothing to disclose. These data have not been

published or presented elsewhere and the manuscript is not under review at any other journal.

Data Availability

All relevant data are within the paper and its Supporting Information files.

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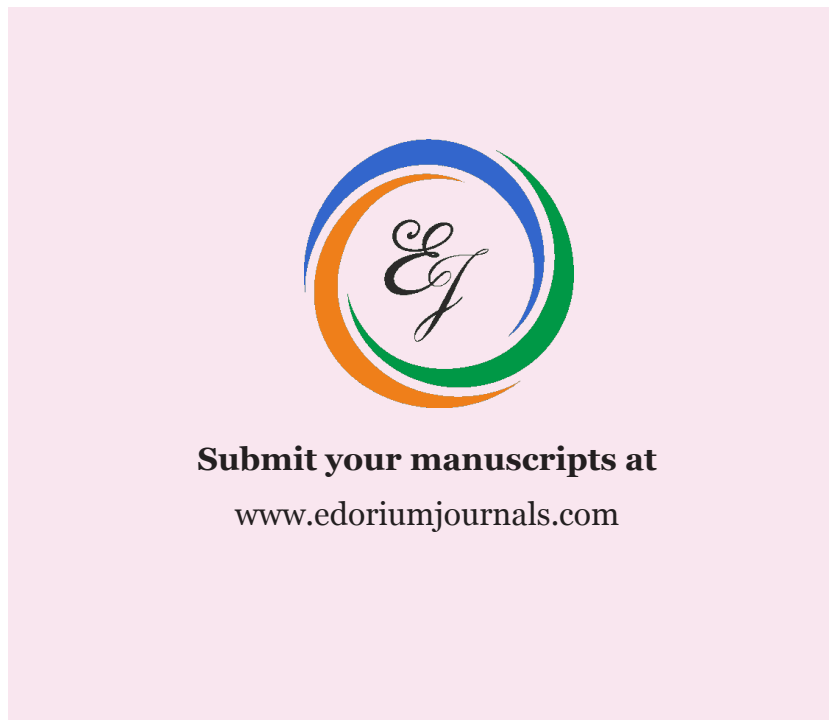
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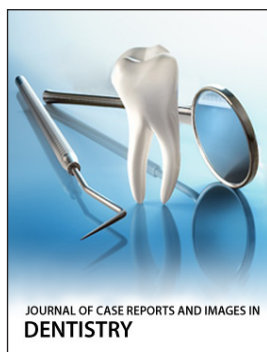
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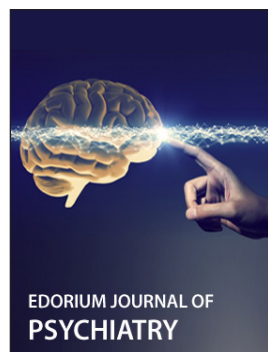
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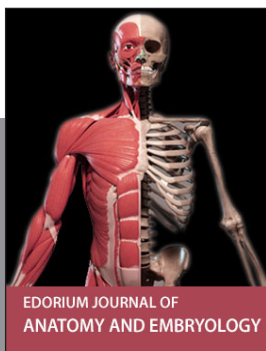
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