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Dermoid Cyst in One Ovary and an Endometrioma in the Others by Laparoscopic Removal

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Abstract

Few case reports of both disorders occurring simultaneously in the ovaries and the conjunction of an endometrioma and a dermoid cyst is extremely rare. A 41-year-old patient complained of pain in her left pelvis. She had a bilateral pelvic mass when she was referred. The results of magnetic resonance imaging revealed an endometrioma on the right side and a dermoid cyst on the left ovary. Up until the day of surgery, the patient was taking ibuprofen for pain relief. The bilateral laparoscopic cystectomy was indicated for her. The laparoscopic operation revealed that the ovaries were bilaterally enlarged and appeared cystic. A right endometrioma rupture was followed by the removal of the left dermoid cyst in its entirety from the ovary during a procedure known as a bilateral ovarian cystectomy. The patient accepted it. Without any complications the surgery. This instance of endometrioma and dermoid cyst coexistence in each ovary, which was confirmed by MRI as a result of unusual ultrasound findings, emphasises how important it is to effectively remove both cysts. The most frequent cause of chronic pelvic pain in women who are fertile is endometriosis, which is also closely related to painful ovulation, menstruation, and infertility. Almost 10% of women globally who are of reproductive age are thought to have endometriosis. Up to 44% of endometriosis patients have ovarian endometrioma, which is the clinical characteristic of the disease. Several findings imply that adhesions between the peritoneum and ovarian surface implants may be the source of endometriomas.

Keywords: Endometrioma, Dermoid cyst, Imaging, Case report

Introduction

The quantity and calibre of follicles within the ovary are referred to as ovarian reserve, and endometrioma itself might have a detrimental effect on it [1]. To assist prevent any harmful effects on ovarian pathophysiology, it is essential to remove this benign cyst as soon as possible [2]. The most prevalent teratoma and the cause of 20% of all ovarian tumours is the mature ovarian cyst teratoma, also known as the ovarian dermoid cyst [3]. The removal of a dermoid cyst must be done carefully in order to preserve the ovarian reserve even though it has no effect on fertility [4]. Dermoid cyst complications can also include rupture, torsion, and malignant transformation. It is highly uncommon for two benign diseases to coexist [5]. The preferred course of therapy will be decided with the support of the endometrioma and dermoid cyst diagnoses [6]. Presentation of a Case a 41-year-old lady with bilateral pelvic masses was referred [7]. The main complaint was severe left pelvic pain. Her bilateral pelvic pain had substantially increased. And for pain relief, she took ibuprofen [8]. On a scale of 1 to 10, the patient described the pain as acute and indicated that it was worse on the left than the right [9]. The patient exhibited normal vital signs and was attentive and afebrile [10]. The pelvic pain wasn't accompanied by any other signs or symptoms. Without guarding or rebound, bilateral adnexal pain was felt upon probing. As the first screening method, transvaginal ultrasonography revealed a bilateral adnexal mass measuring 3.75 4.79 cm and related to ovarian cysts. While the left ovarian cyst displayed some peripheral calcification with solid components, the right ovarian cyst was compatible with hemorrhagic cysts. Ovarian dermoid cysts on both sides were thought to exist. Pelvic magnetic resonance imaging MRI was performed because of abnormal ultrasound results and a worry about malignancy. It revealed a left dermoid cyst and what might be an endometrioma or hemorrhagic cyst on the right. The right ovary was 3.9 cm in diameter and showed precontrast T1 hyper intensity, intermediate to low T2 signal, and no discernible contrast enhancement, all of which were most likely signs of endometrioma. A dermoid cyst-like 3.8 cm fat tumour was visible in the left ovary. Yet, only a histological study could definitively determine whether the pathology was benign or malignant. The patient was encouraged to proceed with bilateral laparoscopic cystectomy after examining his or her treatment choices. She was aware of the dangers associated with surgery and gave her approval. She didn't have any other health or surgical issues. She had two healthy vaginal deliveries and was monogamous. She denied using alcohol or cigarettes. There was no history of colon, ovarian, or breast cancer in the family. There was no recognised allergy in the patient. She used condoms to prevent pregnancy. She didn't have a history of STIs or inflammatory conditions, and her periods were regular. Laparoscopic surgery was carried out under general anaesthetic. The ovaries had a cystic look and were bilaterally enlarged. Electrocautery was used to separate the left cyst from the ovary and remove it intact, with minimal bleeding. When the right ovary's endometrioma was attempted to be removed in a similar manner, it ruptured as a chocolate cyst and was vigorously irrigated without noticeably bleeding. In an Endopouch, the cystic wall of the right ovary was removed. The left ovary's dermoid cyst was also excised and placed in an Endopouch few adhesions in the pelvis were recorded and lysed throughout the process. Little blood loss was necessary to achieve haemostasis. Even after the bilateral cysts were removed, the ovaries were unharmed. Samples were delivered to the pathology section. All specimens were given microscopic and gross descriptions by the pathology department.

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Discussion

The right cyst wall, which was formed from the ruptured endometrioma, showed an epithelial ovarian wall and hemorrhagic ovarian wall. There were significant haemorrhages, hemosiderosis, and stromal tissue of the unusual endometrial type. The sample was delivered as four pieces of homogenous, tan-brown tissue with patches of thick, white fibrotic tissue. An established cystic teratoma was visible in the left dermoid cyst. A layer of granular cells and keratinized squamous epithelium lined the cyst. There were also skin adnexal structures, hair follicles, and hair structures. There was also a nearby straightforward ovarian cyst present. None of the specimens showed any signs of malignancy. Oral analgesics were recommended for the patient. The following day, she verified there were reported having no problems and no pelvic pain. She went back two weeks later to have the sutures placed at the conclusion of the procedure removed. The patient reported being trouble-free and feeling fine. It is highly unusual for dermoid tumour and endometrioma to coexist in the ovaries. This is the first instance that has been documented of an endometrioma in one ovary and a dermoid cyst in the other. To maintain ovarian tissue for the patient's overall and reproductive health, we performed bilateral ovarian cystectomy as the intervention. The majority of cases that have been recorded have either had unilateral or bilateral dermoid cysts with endometriomas in the same ovary. Table 1 demonstrates the coexistence of endometrioma with dermoid cysts, including the imaging methods used for diagnosis and therapy, and it summarises the four publications that were discovered. Seven women were detected in total in the first study mentioned in contrast to A dermoid cyst and an endometrioma were found in two women in the second investigation. According to our understanding, this makes the current case report the 12th instance of a lady who was diagnosed with both an endometrioma and a dermoid cyst. The first article on the list summarises a retrospective study in which 172 cases of dermoid cysts and 313 cases of endometrioma in women were compared. The scientists discovered that 5 of the endometrioma patients also had dermoid cysts. In the dermoid group, they also discovered two more women who had mixed endometriomas. They did not, however, say which ovary each disorder impacted. Despite doing laparoscopic surgery, there was no mention of any imaging procedures beforehand. Their general findings revealed unilateral was within the range of normal. A 22-year-old virgin patient in the second case complained of dysmenorrhea and pelvic pain that was refractory to nonsteroidal anti-inflammatory medications. Eight years prior, she had visited the clinic due to a right ovarian torsion that was consistent with a dermoid cyst. After abnormal findings on an abdominal ultrasound, she later presented with a mixed Endometrioma coexisting with a dermoid cyst on the left ovary, which was verified by MRI. With the exception of the second woman, who underwent an oophorectomy due to ovarian torsion, both women underwent laparoscopic cystectomies. A 22-year-old lady with flank pain was described in the third case report in Table 1. An abdominal ultrasound revealed left ovary abnormalities, including bilateral cystic ovarian tumours. Few case reports of both disorders occurring simultaneously in the ovaries and the conjunction of an Endometrioma and a dermoid cyst is extremely rare. A 41-year-old patient complained of pain in her left pelvis. She had a bilateral pelvic mass when she was referred. An Endometrioma on the right side and a dermoid cyst on the left ovary were both confirmed by magnetic resonance imaging (MRI). Up until the day of surgery, the patient was taking ibuprofen for pain relief. The bilateral laparoscopic cystectomy was indicated for her. The laparoscopic operation revealed that the ovaries were bilaterally enlarged and appeared cystic. A right Endometrioma rupture was followed by the removal of the left dermoid cyst in its entirety from the ovary during a procedure known as a bilateral ovarian cystectomy. The person had no problems with the operation and tolerated it. This instance of Endometrioma and dermoid cyst coexistence in each ovary, which was confirmed by MRI as a result of unusual ultrasound findings, emphasises how important it is to effectively remove both cysts. The most frequent cause of chronic pelvic pain in women who are fertile is endometriosis, which is also closely related to painful ovulation, menstruation, and infertility. Almost 10% of women globally who are of reproductive age are thought to have endometriosis. Ovarian Endometrioma is the clinical manifestation of endometriosis and is present in up to 44% of people with endometriosis several findings imply that adhesions between the peritoneum and ovarian surface implants may be the source of endometrium's. The quantity and calibre of follicles in the ovary, which is characterised by Endometrioma, can be negatively impacted. Inside of an ovary. To assist prevent any adverse effects on ovarian pathophysiology, it is essential to remove this benign cyst as soon as possible. The most prevalent Teratoma and the cause of 20% of all ovarian tumours is the mature ovarian cyst Teratoma, also known as the ovarian dermoid cyst. The removal of a dermoid cyst must be done carefully in order to preserve the ovarian reserve even though it has no effect on fertility. Dermoid cyst complications can also include rupture, torsion, and malignant transformation. It is highly uncommon for two benign diseases to coexist. The preferred course of therapy will be decided with the support of the Endometrioma and dermoid cyst diagnoses. A 41-year-old lady with bilateral pelvic masses was referred. The main complaint was severe left pelvic pain. Her pelvic pain had intensified considerably. She took ibuprofen for the ache she was experiencing bilaterally. On a scale of 1 to 10, the patient gave the pain a 5 severity rating, describing it as severe and worse on the left than the right. The patient exhibited normal vital signs and was attentive and afebrile. The pelvic pain wasn't accompanied by any other signs or symptoms. Without guarding or rebound, bilateral adnexal pain was felt upon probing. The first screening method, transvaginal ultrasonography, revealed bilateral adnexal masses measuring cm and resembling ovarian cysts. While the left ovarian cyst displayed some peripheral calcification with solid components, the right ovarian cyst was compatible with hemorrhagic cysts. Ovarian dermoid cysts on both sides were thought to exist. Pelvic magnetic resonance imaging was done because of abnormal ultrasound results and a worry about cancer. It revealed a left dermoid cyst and what might be an Endometrioma or hemorrhagic cyst on the right.

Conclusion

The right ovary was 3.9 cm in diameter and showed precontrast T1 hyper intensity, intermediate to low T2 signal, and no discernible contrast enhancement, all of which were most likely signs of Endometrioma. A dermoid cyst-like 3.8 cm fat tumour was visible in the left ovary. Yet, only a histological study could definitively determine whether the pathology was benign or malignant. The patient was encouraged to proceed with bilateral laparoscopic cystectomy after examining his or her treatment choices. She was aware of the dangers associated with surgery and gave her approval. She didn't have any other health or surgical issues. She had two healthy vaginal deliveries and was monogamous. She denied using alcohol or cigarettes. There was no history of colon, ovarian, or breast cancer in the family. There was no recognised allergy in the patient. She used condoms to prevent pregnancy. She didn't have a history of STIs or inflammatory conditions, and her periods were regular. Laparoscopic surgery was carried out under general anaesthetic. The ovaries had a cystic look and were bilaterally enlarged. Electrocautery was used to separate the left

cyst from the ovary and remove it intact, with minimal bleeding. In attempting to remove the The right ovary's Endometrioma burst as a chocolate cyst and was vigorously irrigated without noticeably bleeding. In an End pouch, the cystic wall of the right ovary was removed. The left ovary's dermoid cyst was also excised and placed in an End pouch. During the treatment, a few pelvic adhesions were discovered and lysed. Little blood loss was necessary to achieve haemostasis. Even after the bilateral cysts were removed, the ovaries were unharmed. Samples were delivered to the pathology section. It is highly unusual for dermoid tumour and Endometrioma to coexist in the ovaries. This is the first instance that has been documented of an Endometrioma in one ovary and a dermoid cyst in the other. To maintain ovarian tissue for the patient's overall and reproductive health, we performed bilateral ovarian cystectomy as the intervention. The majority of cases that have been recorded have either had unilateral or bilateral dermoid cysts with endometrium's in the same ovary. Demonstrates the coexistence of Endometrioma with dermoid cysts, including the imaging methods used for diagnosis and therapy, and it summarises the four publications that were discovered. The initial analysis in Table 1 discovered a total of seven women, whereas the second investigation found two cases of endometrium's and dermoid cysts in female patients. According to our understanding, this makes the current case report the 12th instance of a lady who was diagnosed with both an Endometrioma and a dermoid cyst. In contrast, additional findings revealed that a unilateral Endometrioma may also manifest on the right side because of the sigmoid colon's anatomical placement, which puts it in close proximity to the left ovary. By preventing endometrial tissue from growing during a period, this position may stop it from refluxing into the left fallopian tube. Although this idea is relevant to the case study, to our knowledge no research has looked at the causes of an Endometrioma on the right ovary coexisting with a dermoid cyst on the left ovary.

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None

Conflict of Interest

None

References

1. Akinwaare, Margaret, Ogbeye, Gbemisola, Ejimofor, et al. (2019) Social Support during Pregnancy among Pregnant Women in Ibadan, Nigeria. Int J Nur Midwife and Health Related Cases 5: 14-26.
2. Barclay L, Everitt L, Rogan F et al. (1997) Becoming a Mother-an analysis of women's experience of early Motherhood. J Adv Nurs 25: 719-729.
3. Cherry K (2020) Social Support Is Imperative for Health and Well-Being.
4. Cherry K (2020) Why Irritability Can Be a Symptom of a Mental Condition.
5. Murphey C, Carter P, Price LR, Champion JD, Nichols F (2017) "Psychological Distress in Healthy Low-Risk First-Time Mothers during the Postpartum Period: An Exploratory Study". Nurs Res Pract 16.
6. Danish, N, Fawad A, Abbasi N (2010) Assessment of pregnancy outcome in primigravida: comparison between booked and un-booked patients. J Ayub Med Coll Abbottabad 22: 23-25.
7. Darwin Z, Galdas P, Hinchliff S, Littlewood, Mc Millan ED, et al. (2017) Fathers views and experiences of their own mental health during pregnancy and the first postnatal year: a qualitative interview study of men participating in the UK Born and Bred in Yorkshire (BaBY) cohort. BMC Pregnancy and Childbirth 17: 45.
8. Divney AA, Sipsma H, Gordon D, Niccolai L, Magriples U, et al. (2012) Depression during Pregnancy Among Young Couples: The Effect of Personal and Partner Experiences of Stressors and the Buffering Effects of Social Relationships. J Pediatr Adolesc Gynecol 25: 201-207.
9. Giesbrecht GF, Poole JC, Letourneau N, Campbell T, Kaplan BJ, et al. (2013) The Buffering Effect of Social Support on Hypothalamic-Pituitary-Adrenal Axis Function During Pregnancy. Psychosom Med 75: 856-862.
10. Ginja S, Coad J, Bailey E (2018) Associations between social support, mental wellbeing, self-efficacy and technology use in first-time antenatal women: data from the BaBBLeS cohort study. BMC Pregnancy Childbirth 18: 441.