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Original Research Paper

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A CASE REPORT OF ACCESSORY AND CAVITATED UTERINE MASS (ACUM): A RARE MULLERIAN ANOMALY AND WAYS TO MANAGE AN ADEQUATE FERTILITY WINDOW AFTER SURGERY

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ABSTRACT

INTRODUCTION: An accessory cavitated uterine mass (ACUM) is a rare congenital Mullerian anomaly where an accessory cavity with normal endometrial lining lies within a normally functioning uterus. It is common among young and nulliparous women presenting with severe dysmenorrhea and infertility. In most cases, surgical treatment is recommended due to severe dysmenorrhea.

PRESENTATION OF CASE: We present a case of a 22 yr old nulliparous woman with severe dysmenorrhea since adolescence which was not relieved with any form of hormonal treatment. ACUM was suspected preoperatively based on TVS findings, and she was treated with laparoscopic excision under ultrasound guidance. A uterine mass was found at the insertion of the left round ligament during surgery. Histopathological examination confirmed the diagnosis. Postoperatively, patient did well, with no further dysmenorrhea.

CONCLUSION : The diagnosis of ACUM is often confused with non-communicating rudimentary uterine horn, true cavitated adenomyosis and degenerating fibroids. It is important to understand and distinguish ACUM. Progressive dysmenorrhea in young adolescence female all possibility of uterine anomaly, endometriosis and ACUM should be kept in mind. Transvaginal scan is best primary diagnostic tool.Cofirmation is done by MRI pelvis and diagnostic laparoscopy hysteroscopy so that correct surgery can be performed, especially when fertility is desired.

KEYWORDS : accessory and cavitated uterine mass, dysmenorrhea, laparoscopic excision, nulligravida, fertility sparing ways

INTRODUCTION

An accessory cavitated uterine mass (ACUM) is a rare congenital Mullerian anomaly where an accessory cavity with normal endometrial lining lies within a normally shaped and normally functioning uterus. This uterine malformation is different from the common Mullerian uterine malformation described in the ESHRE/ESGE consensus statement. It occurs due to the duplication or persistence of ductal Mullerian tissue, which is believed to have originated from gubernaculum dysfunction, leading to accessory uterine tissue formation. Müllerian anomalies can cause severe clinical symptoms and threaten quality of life. Congenital uterine anomalies may cause severe dysmenorrhea in adolescents and lead to problems with fertility. Approximately 7% of young women have an anatomical abnormality in their reproductive tract and the most frequent symptom of this is intolerable pain. The reports of non-communicating, accessory uterine cavities with cystic adenomyomas all have a common pathological finding: an Accessory and Cavitated Uterine Mass (ACUM) with normal functional endometrium. .ACUM is found at the level of insertion of the round ligament and its origin may be liked to a dysfunction of the female gubernaculum. ACUM is often misidentified as other uterine malformations (bicornuate uterus and segmental atresia), cystic adenomyoma, or degenerated leiomyomas. The criteria used to diagnose ACUM are a s follows:(a) an isolated, accessory, cavitated mass; (b) a normal uterus (with endometrial lumen), fallopian tubes, and ovaries; (c) surgical evidence with an excised mass and pathological finding; (d) an accessory cavity lined by endometrial epithelium, with glands and stroma; (e) chocolate-brown-colored fluid content; and (f) no adenomyosis. Most cases of ACUM have been diagnosed in women aged less than 30 years and those who are nulliparous; however, some cases have been reported in women who are older than 30 years or are multiparous. ACUM causes severe dysmenorrhea and recurrent pelvic pain in young women, usually requiring surgical treatment. Since most of these patients will wish to preserve fertility, excision of the tumor under ultrasound guidance without mishandling the fallopian tubes and prevent uneventful entry into uterine cavity is often the treatment of choice.

PATIENT REPORT

A 22-year-old married nulligravida woman presented with a history of chronic pelvic pain and severe dysmenorrhea since 5 years, which is progressive in nature and was not relieved with any form of hormonal treatment and oral contraceptive pills, relived by injectable analgesics only. She had attained menarche at 15 years of age and having dysmenorrhea after 2 year of menarche. However, the severe dysmenorrhea recurred after she resumed menstruating. Transvaginal ultrasonography showed a normal sized uterus having hypoechoic mass of about 2.8 cm x 2.6 cm With isoechoic fluid filled cavity around 7-8 mm seen adjacent to uterus (Fig no1) which may leads to differential diagnosis of Uterine horn or Hematometra or bicornuate uterus or Cystic degeneration of fibroid or Accessory cavitated uterine mass (ACUM) Endometrial echo is in midline and Cervix normal Both ovaries are normal shape and size.As patient went through diagnostic laparoscopy and hysteroscopy, on diagnostic hysteroscopy shows a normal uterine cavity and both ostia were seen with no bulge seen (fig no 2). On laparoscopy showed a uterus with a globular swelling felt and seen on left anterior wall close to the round ligament insertion (Fig. 3) and no endometriotic nodules were found on ovary, uterine surface, pouch of Douglas. On chromopertubation – both tubes patent. Then laparoscopic excision of nodule was planned under USG guidance.. Diluted vasopressin was injected into the myometrium to achieved marble appearance and haemostasis. Incision kept on utero-vesical fold to prevent bladder injury. Then circumferential incision given on anterior serosa and myometrium around 3-5 ml of thick chocolate colored material spills out while excising the mass (Fig no 4). Specimen retrieved and sent for histopathological examination. Myometrium closer done with polyglactin (vicryl no1) suture in layer by layer manner.Haemostatsis achieved. Through lavage with normal saline done. Post-operatively, the patient had an uneventful recovery and was discharged 48

hour later. During her follow-up, she was asymptomatic and an ultrasound scan showed no abnormal findings. Histological examination revealed a central cavity lined with functional endometrium and surrounded by smooth muscle. A pathologist determined that there was no evidence of adenomyosis. These results along with the operative findings confirmed the diagnosis of ACUM.

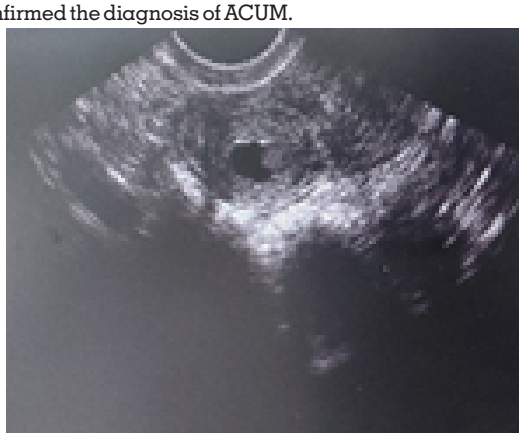


Fig no 1

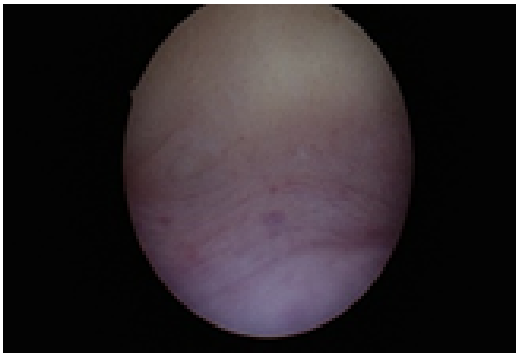
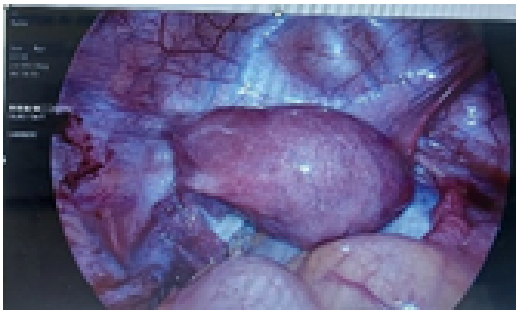


Fig no 2



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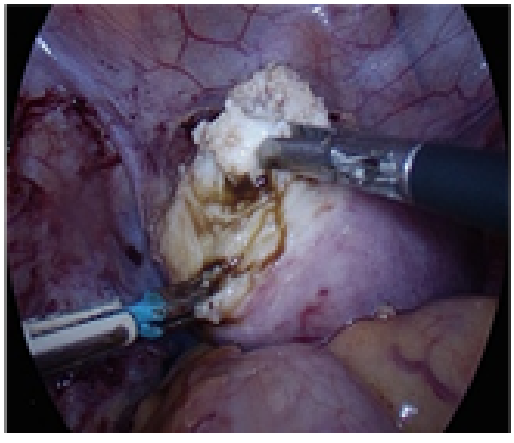

Fig no 4

CONCLUSION

ACUM is a rare congenital anomaly. Only Few cases were reported till date. In progressive dysmenorrhea of young patient all possibilities of congenital anomalies of uterus, endometriosis and ACUM should be kept. Good TVS –USG scan is best primary diagnostic tool. Since most patients with ACUM suffer from dysmenorrhea, surgical excision is necessary and can be easily done by laparoscopy. Correct diagnosis can be made only after excision and histopathological examination. To preserve fertility always Place incision away from fallopian tube. For delineating uterine cavity to prevent uneventful entry into cavity- a) Use methylene blue dye for cavity demarcation, b) Use hegars dilator and best way is transvaginal USG during ACUM excision. for future we advise patient– 1) Avoid conception at least for 6 month & 2) Delivery should be done by elective lower segment caesarean section which is optional..ACUM diagnosis can only be suspected preoperatively and confirmed only after histopathological examination. However, accurate preoperative diagnosis is important to determine the need for and type of surgery

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