

(EPI 3.08). Recognising ACUM (Accessory Cavitated Uterine Malformation) on ultrasound: five diagnostic clues

Dr. Ladbans Kaur, Dr. A Bhalla, Dr. M Preet

Objectives:

To highlight the seven diagnostic ultrasound clues for diagnosing (ACUM).

Methods:

Retrospective review performed of 19 patients diagnosed with ACUM at our institution between January 2023 and January 2026.

Results:

All participants ranged in age from 20 to 35 years, presenting with debilitating dysmenorrhea which did not respond to oral pain killers and injectables. Imaging typically demonstrated a solitary rounded cavitated lesion enveloped by a thick isoechoic myometrial rim with internal turbid content consistent with retained blood Fig1. All cases showed the lesion within the anterolateral wall of uterus inferior to interstitial segment of fallopian tube and producing a “uterus-within-a-uterus” appearance Fig 2. No communication with the endometrial cavity seen on 2D and 3D Fig3. Location of lesion seen lateral to the arcuate vessels and limited by serosa Fig 4. Colour Doppler showed separate vascularity of ACUM and of uterine vasculature. Forming characteristic “Two Wheels of Colour” appearance. The five clues on imaging as mentioned above were observed in all our cases. Laparoscopic removal was successfully performed in all the patients and histopathology confirmed the diagnosis of ACUM. Follow up of patients revealed complete relief of symptoms.

Conclusions:

Identifying these characteristic five sonographic features can prompt early suspicion of ACUM, especially in young women with severe dysmenorrhea and a normal uterine cavity. Timely recognition on ultrasound helps avoid misdiagnosis, guides appropriate evaluation, and supports early management, ultimately improving patient outcomes



Fig 1. Isolated unilocular cavitated spherical lesion surrounded by thick isoechoic myometrial mantle with internal turbid content in the left anterolateral wall of the uterus.

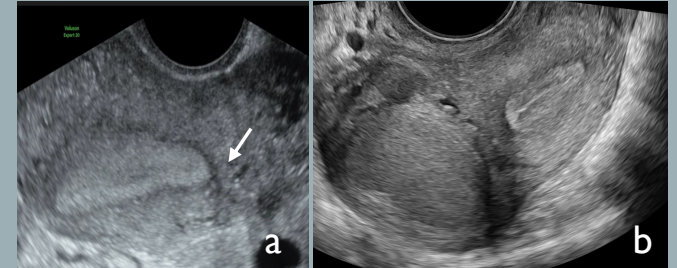


Fig 2. ACUM seen inferior to interstitial segment of fallopian tube (arrow) producing a “uterus-within-a-uterus” appearance (a, b).

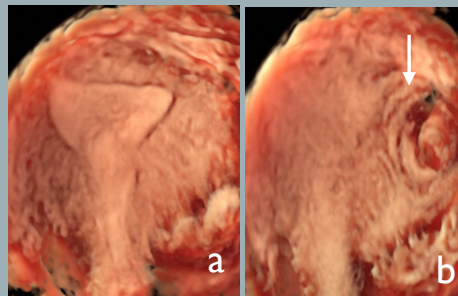


Fig 3. ACUM (arrow) is not connected with the endometrial cavity and is visualized in a different plane than the uterine cavity.



Fig 4. ACUM is located lateral to the arcuate vessels (arrow) and limited by serosa

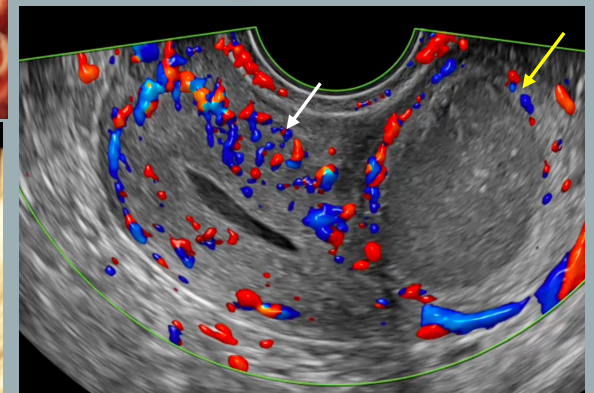


Fig 5. Separate vascularity of uterus and ACUM. Circumferential flow surrounding the ACUM (yellow arrow) and the arcuate vessels of uterus (white arrow)