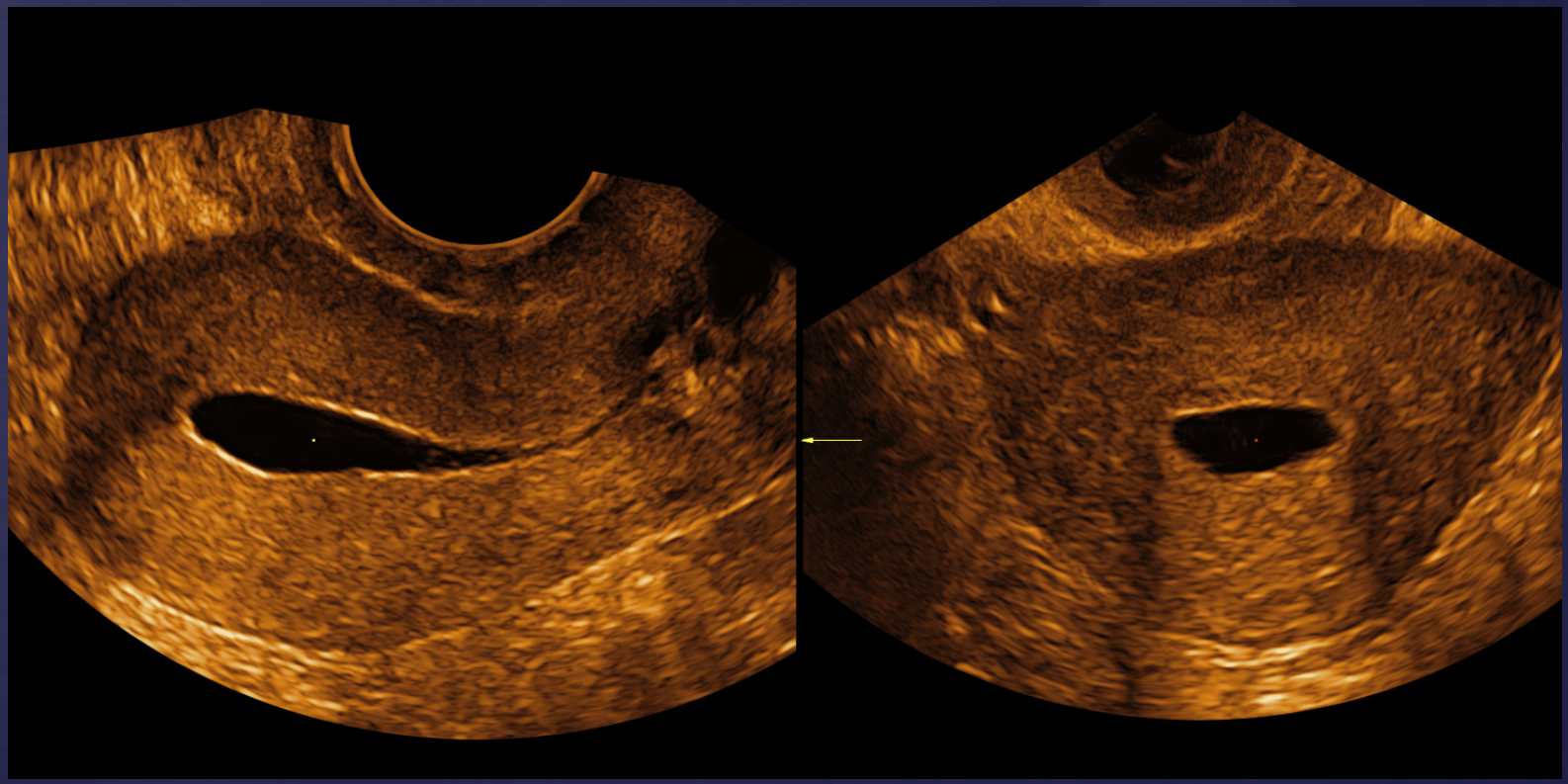
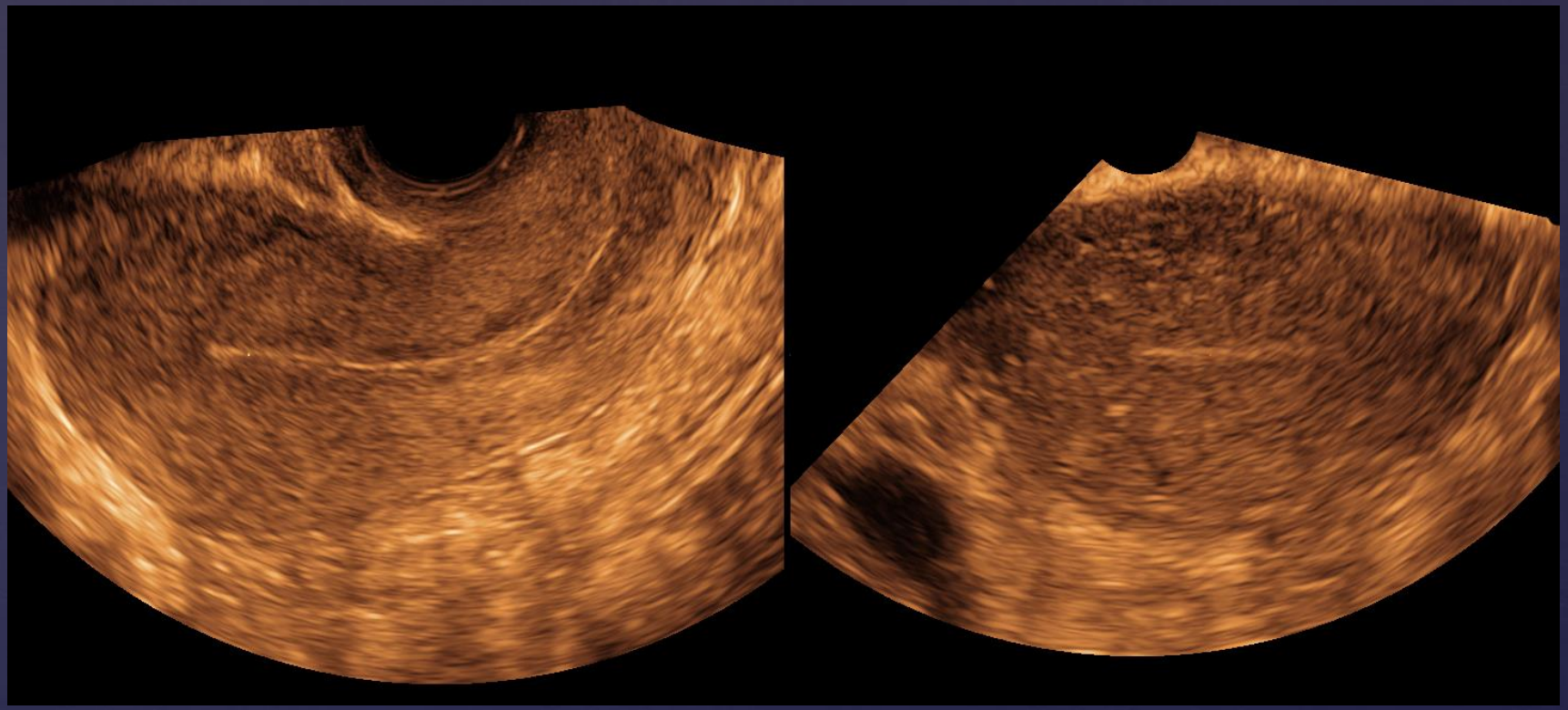
AIUM Image Library: Sonohysterography

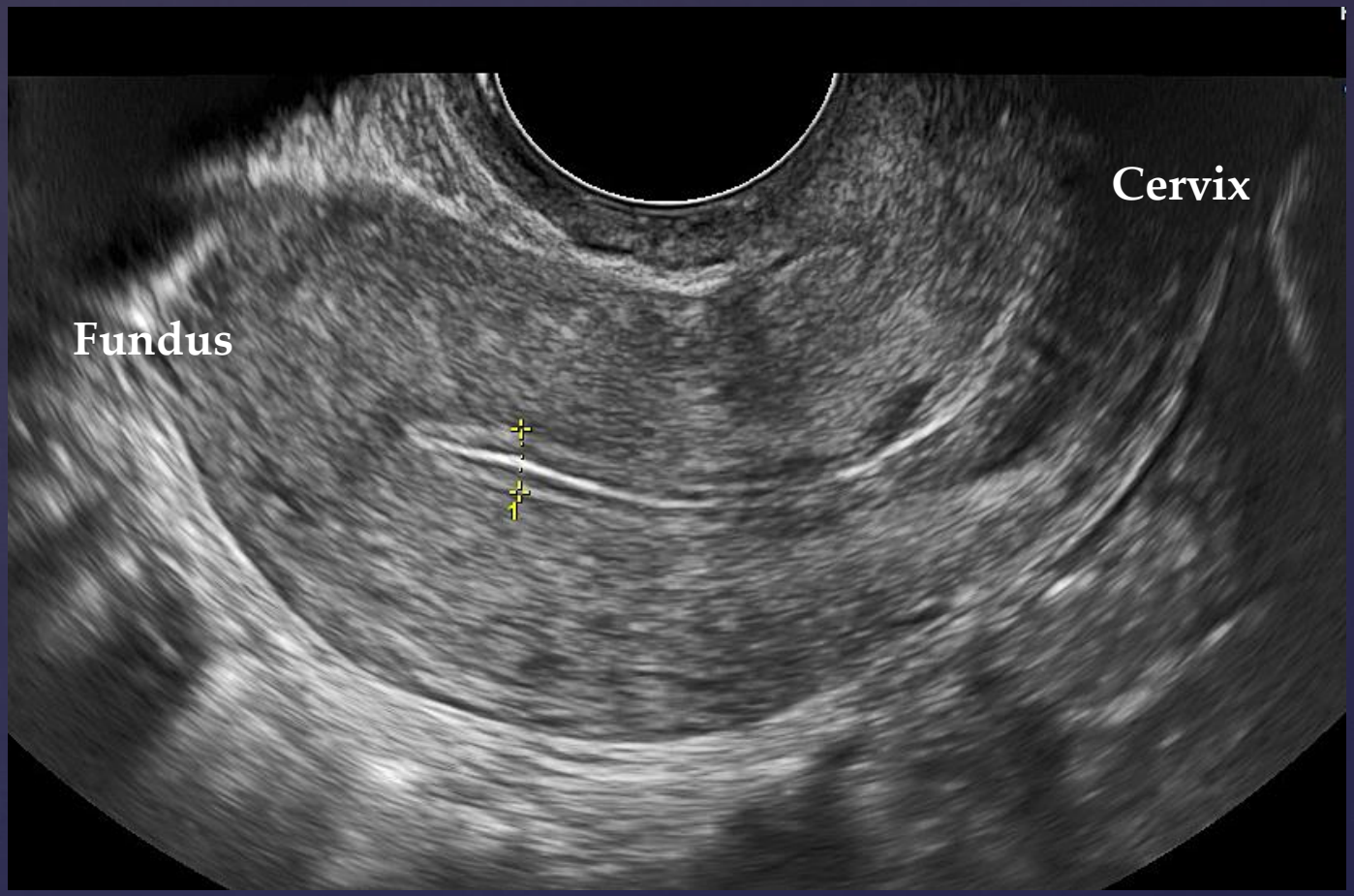


Preparation



Preliminary endovaginal sonography of the uterus, endometrium and ovaries should be performed before sonohysterography. Precatherization images should be obtained and recorded, in at least 2 planes, to demonstrate normal and abnormal findings.

Preparation

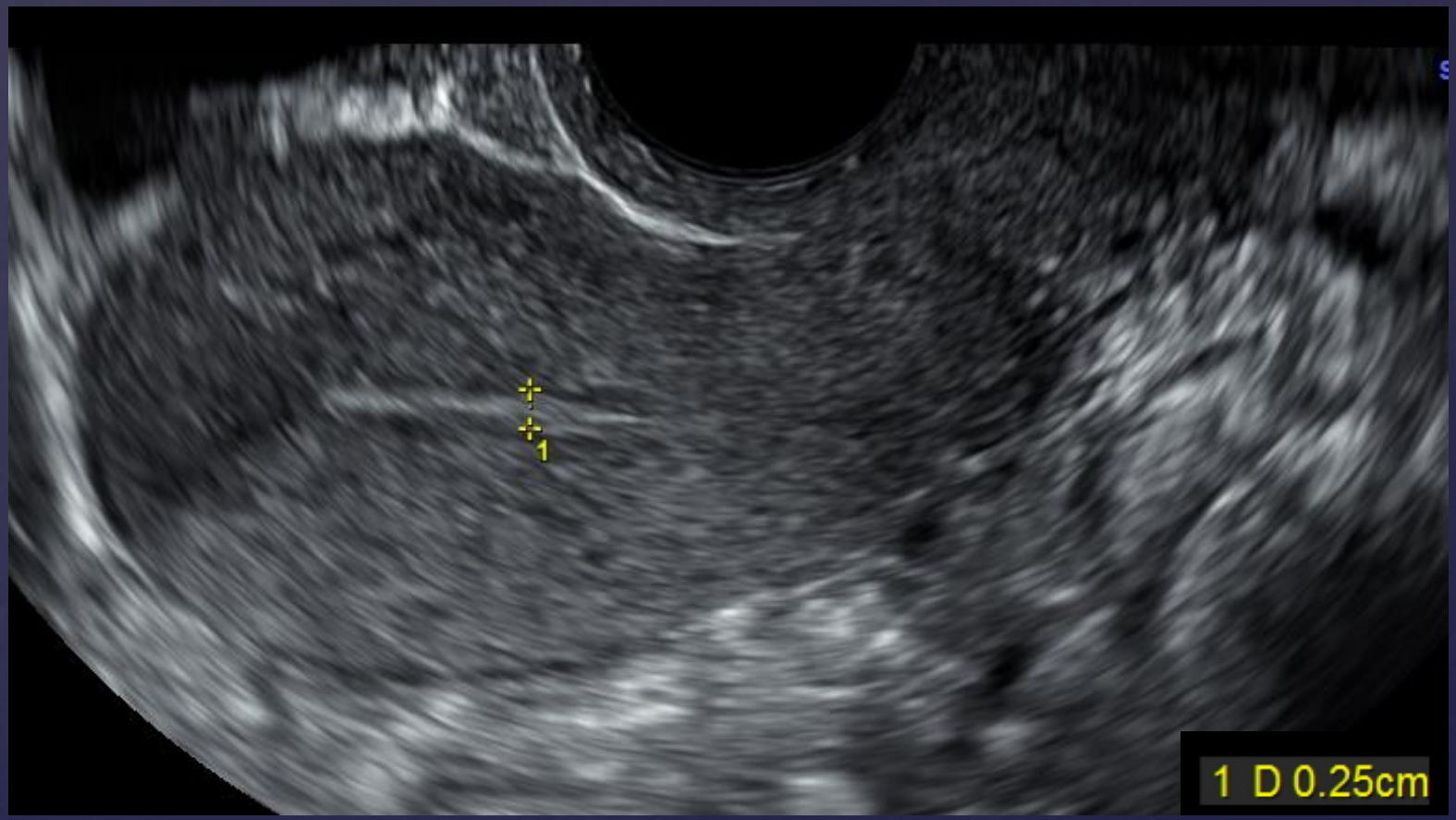


Sagittal scan of the uterus demonstrates a thin endometrium. In a patient with regular cycles, sonohysterography should not, in most cases, be performed later than the 10th day of the menstrual cycle.

Preparation

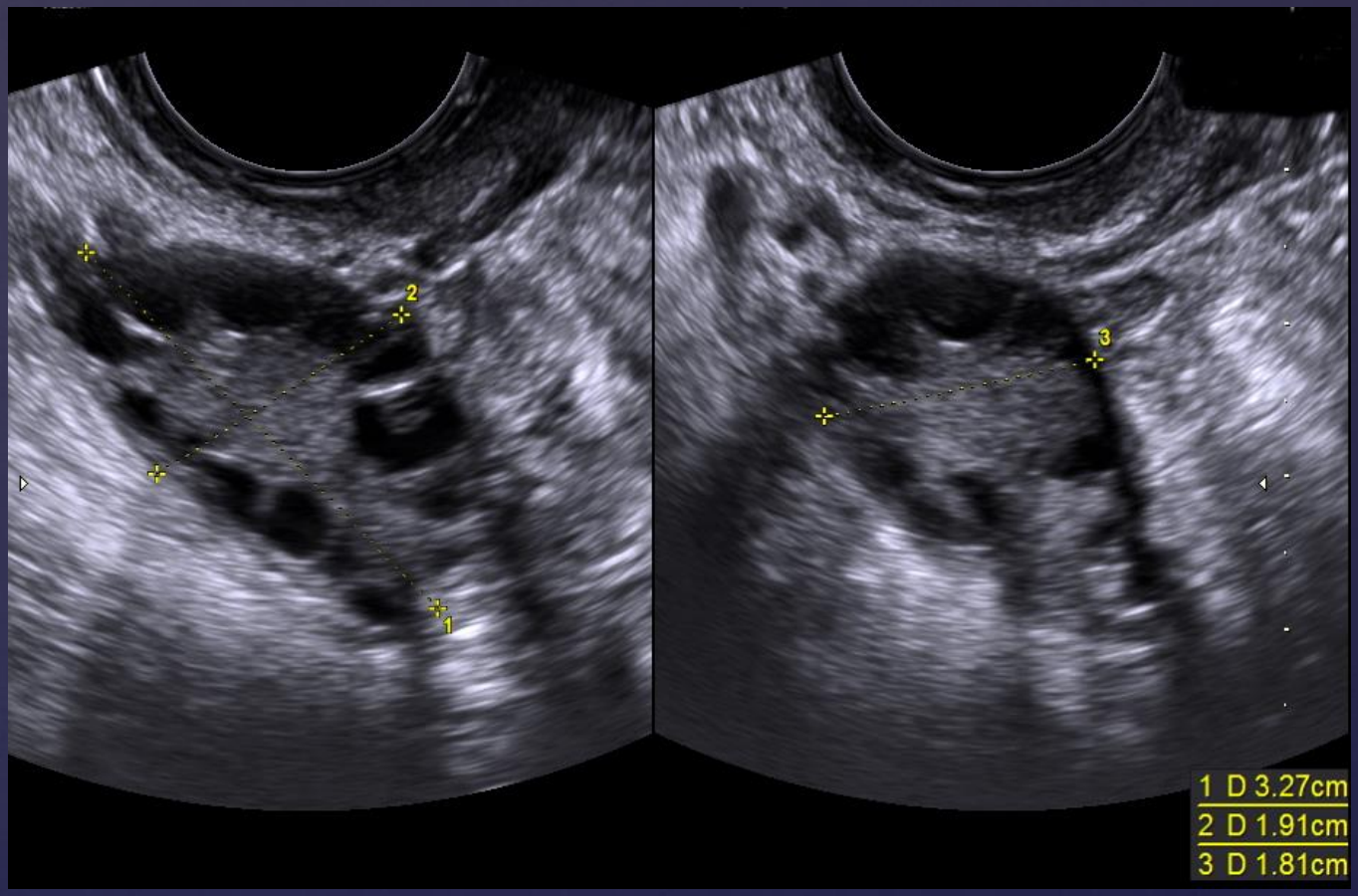
Transvaginal image of a hydrosalpinx. In the presence of nontender hydrosalpinges, consideration may be given to administering antibiotics at the time of the examination.

Endometrium



Images of the uterus should include the thickest bilayer endometrial measurement on a sagittal image if possible.

Ovaries

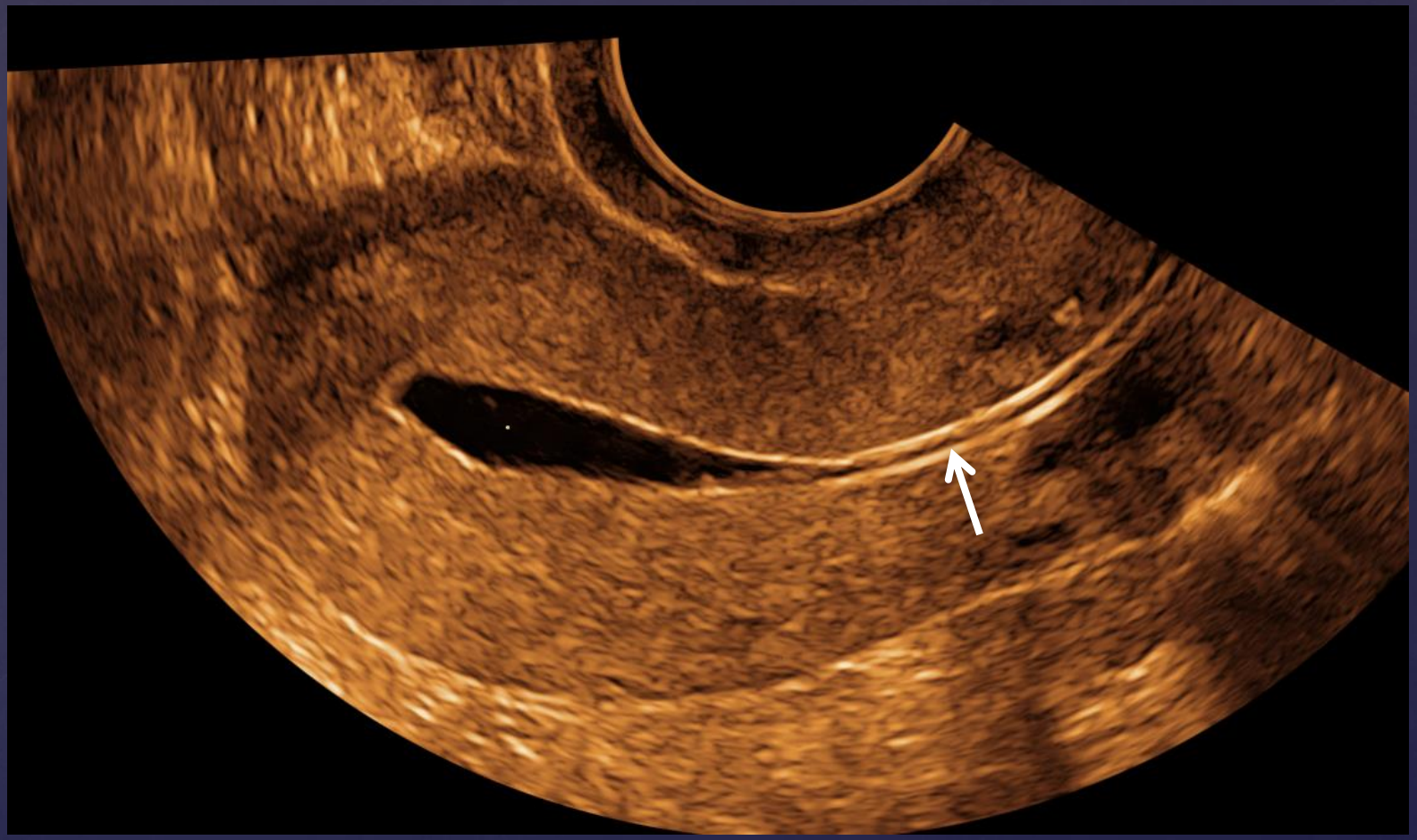


TV scan of an ovary showing measurements in three perpendicular planes.

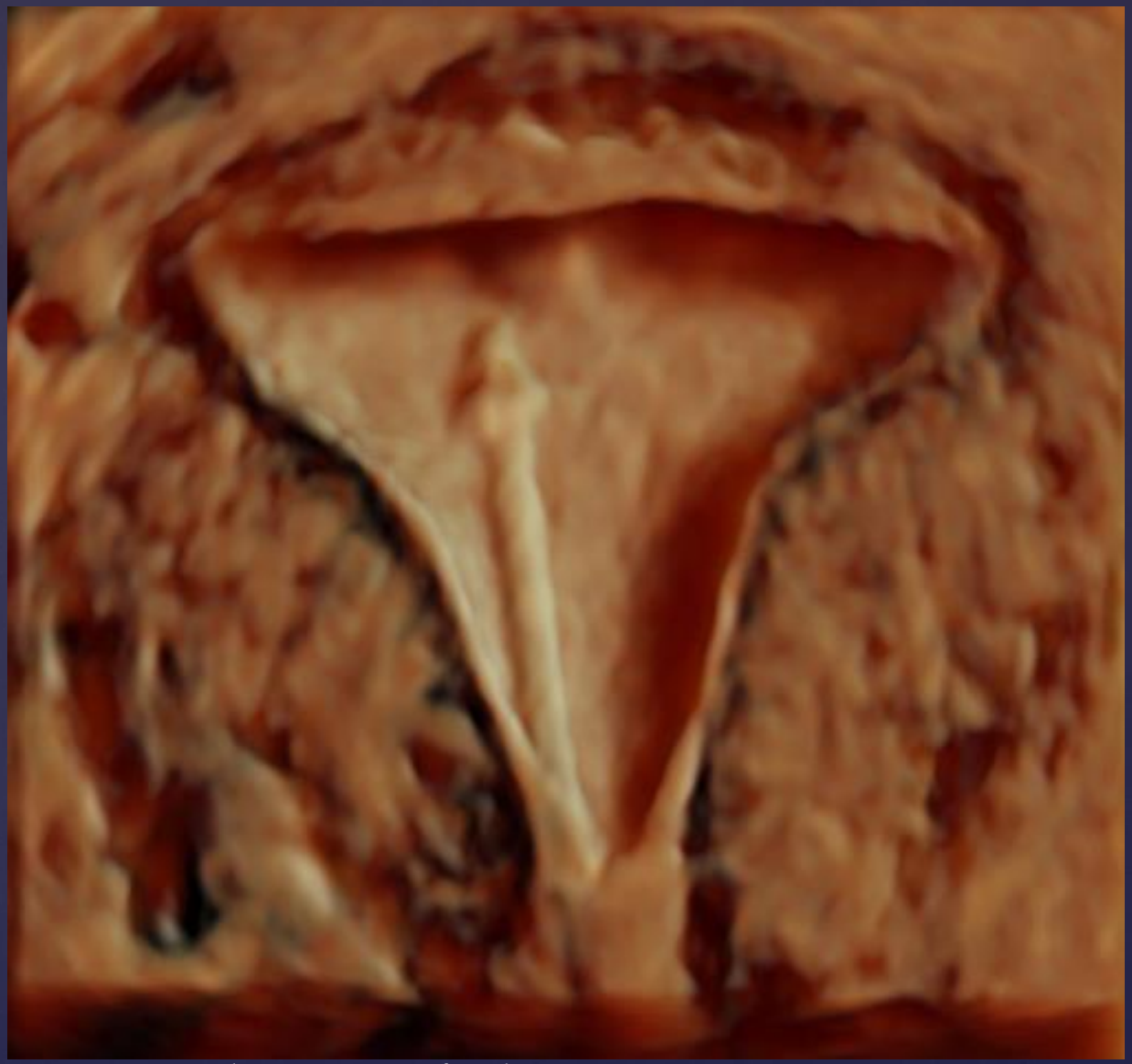
Cul de Sac

Evaluation should include the presence or absence of free fluid within the cul-de-sac.

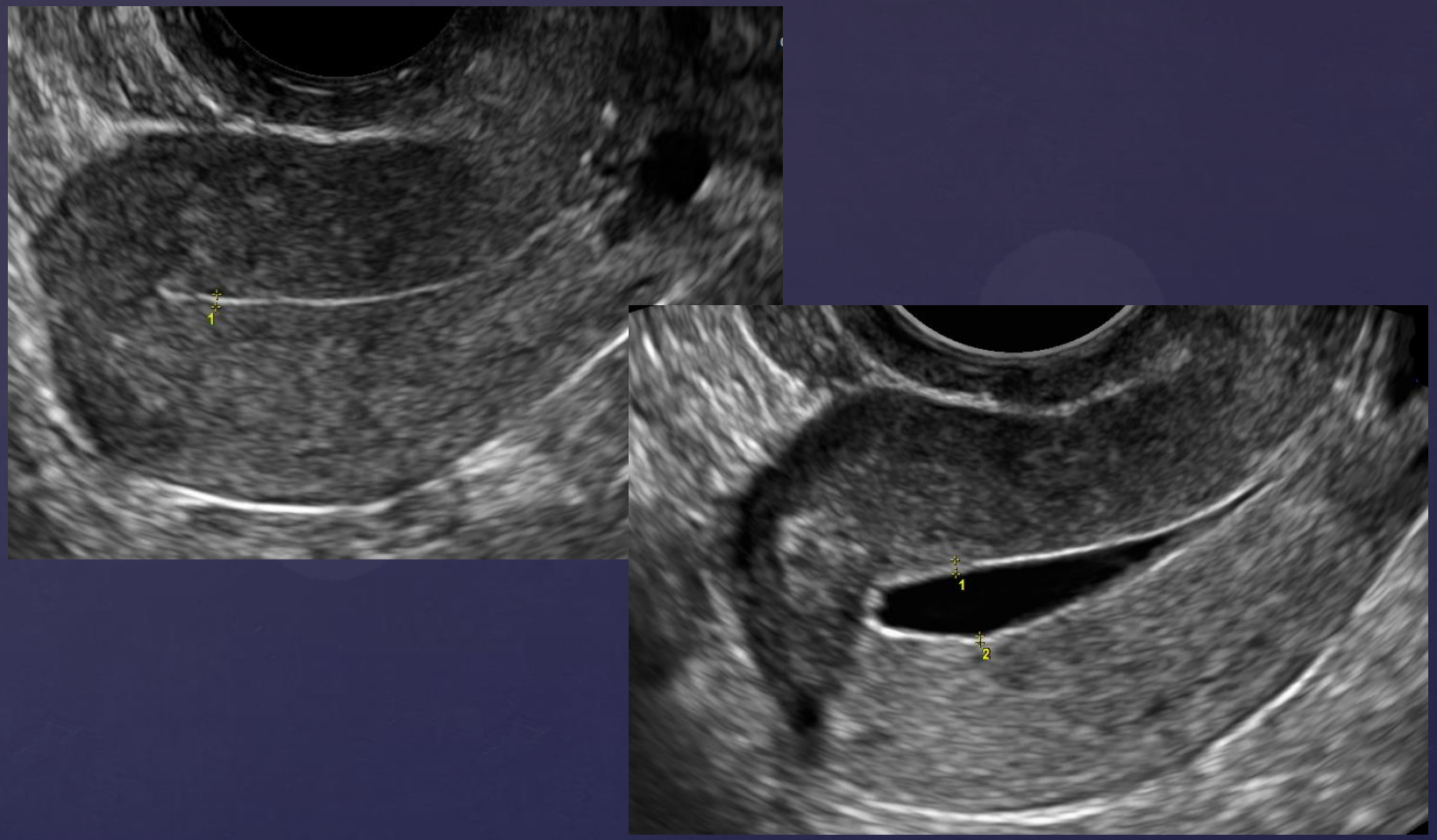
Filling & Distending the Endometrial Cavity



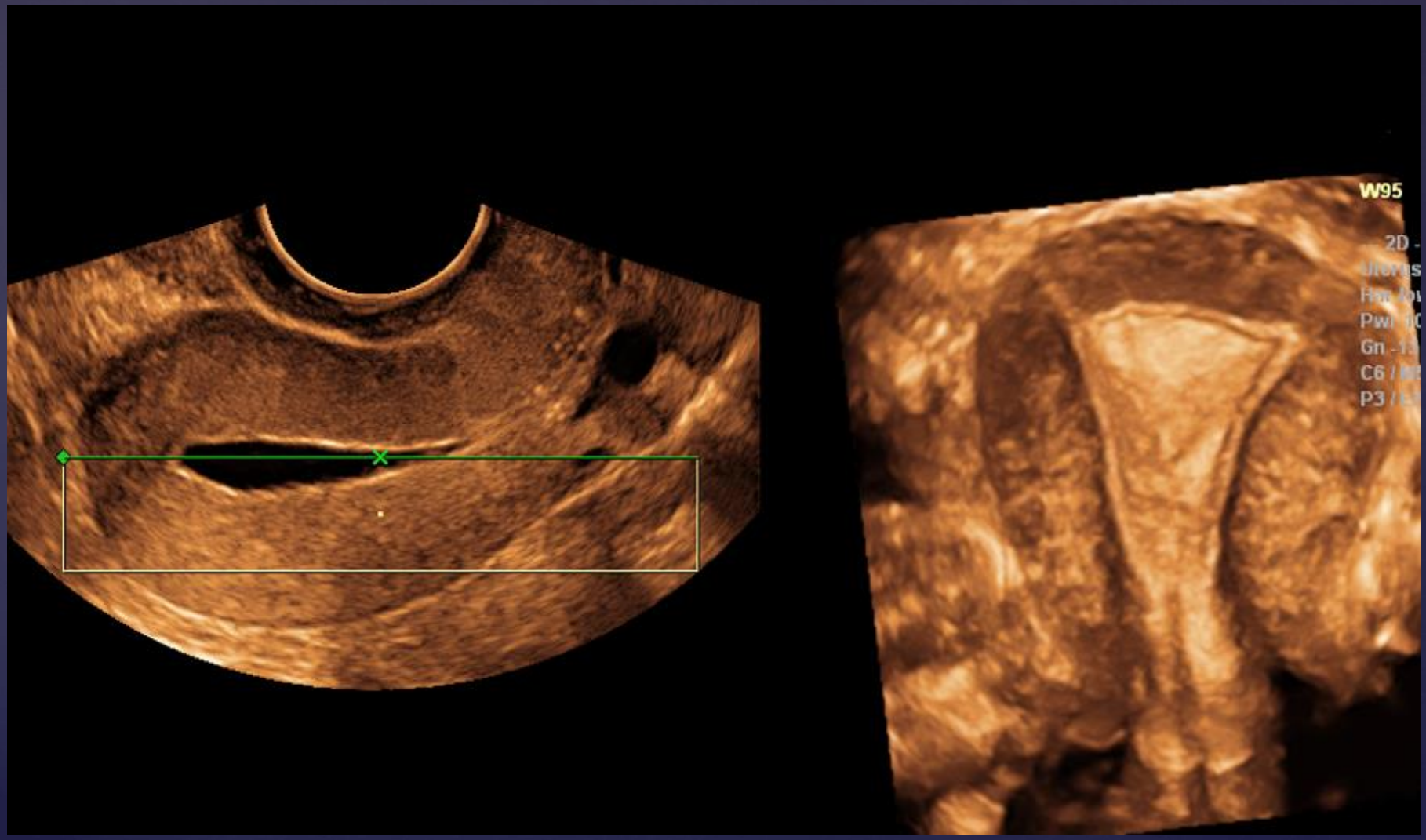
Appropriate sterile fluid, such as normal saline or water, should be used for sonohysterography. Note the double echogenic line of the catheter within the cervix (arrow).



A coronal view of the uterine cavity using 3D ultrasound and Hd*live* surface rendering. Note the catheter tip within the endometrial cavity.



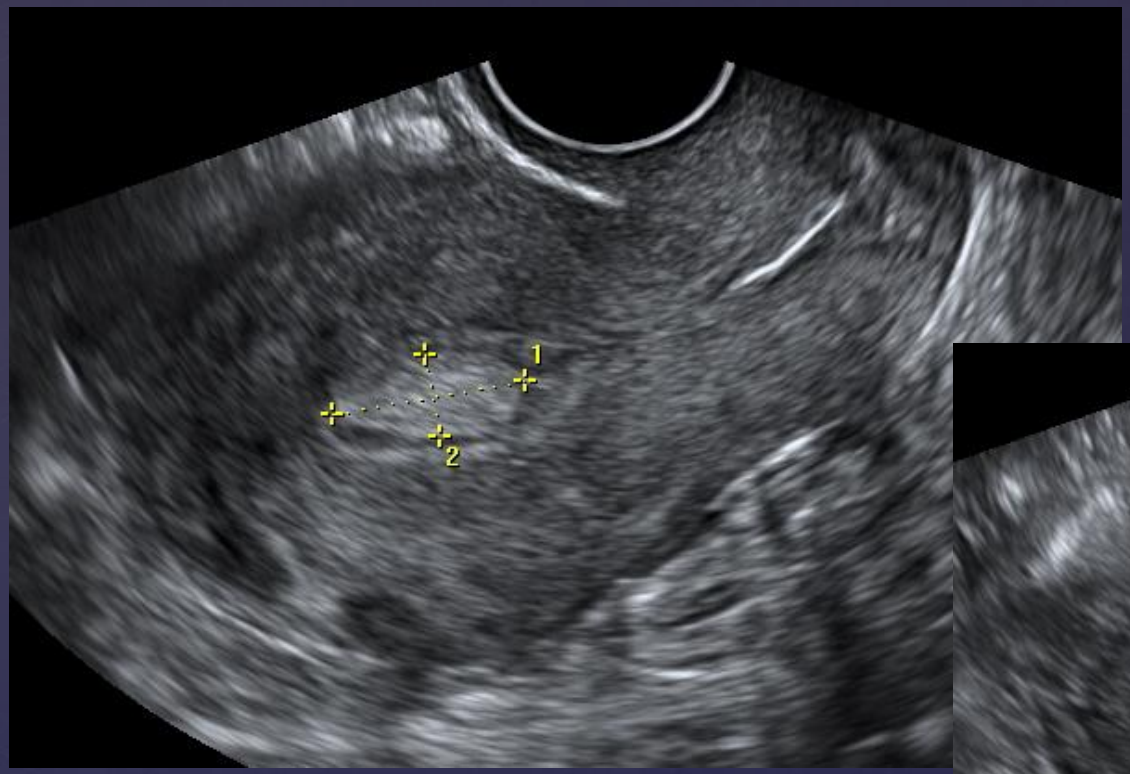
Sagittal images of the endometrial cavity pre- and post-distension.

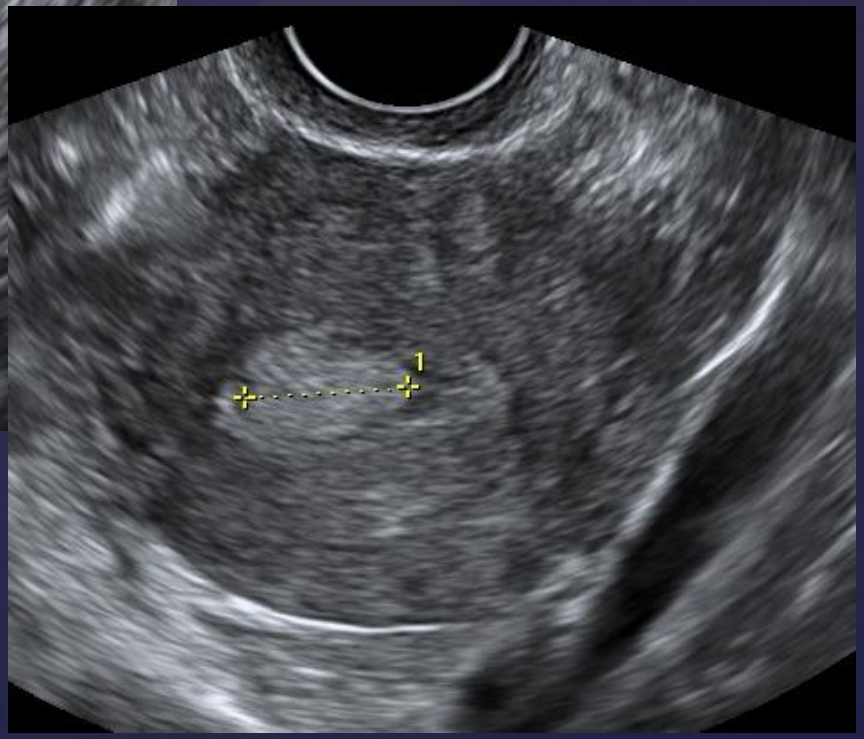


3D rendered coronal images of the endometrial cavity post-distension.

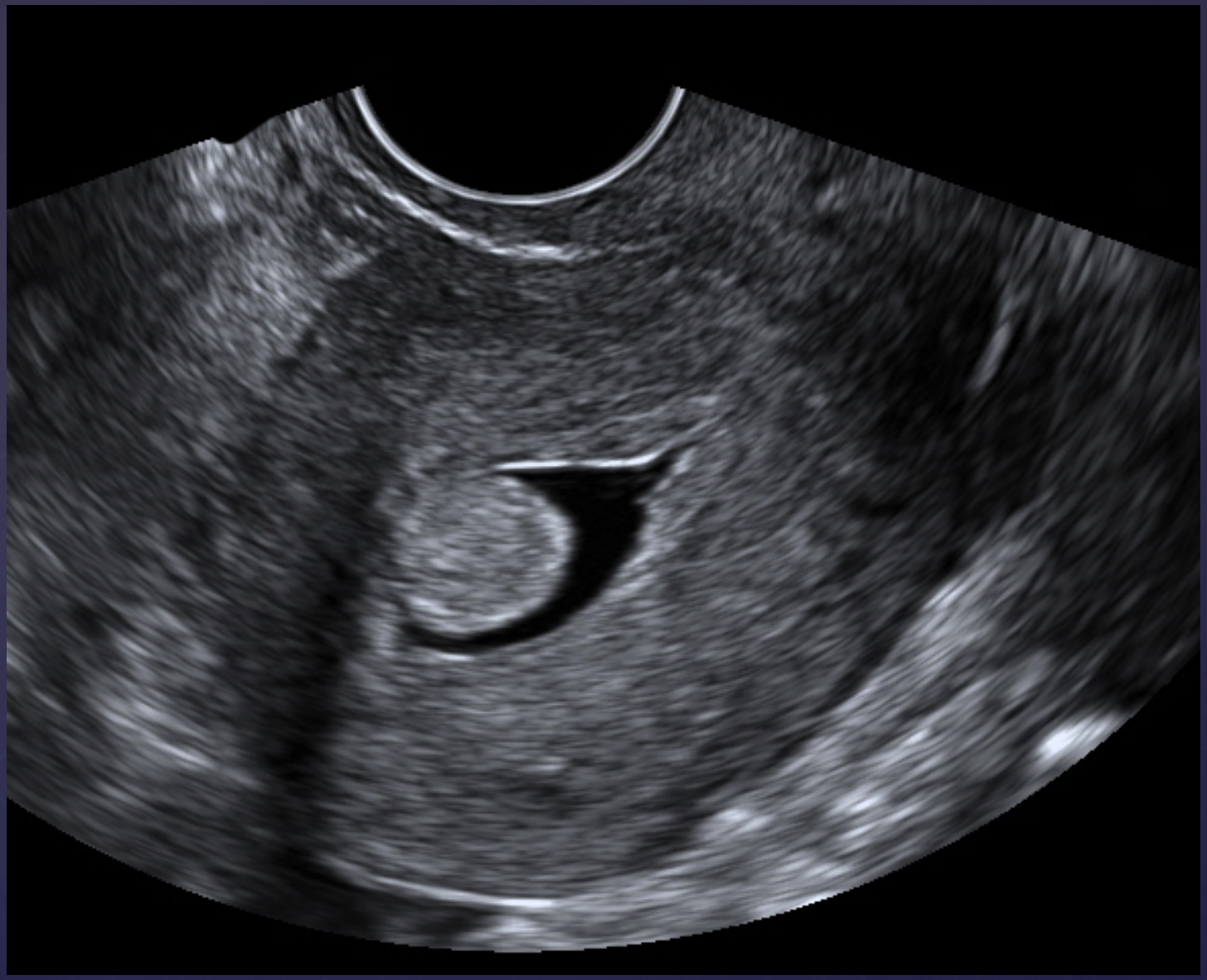
Whenever a balloon catheter is used, document its removal.

Case Presentation 1

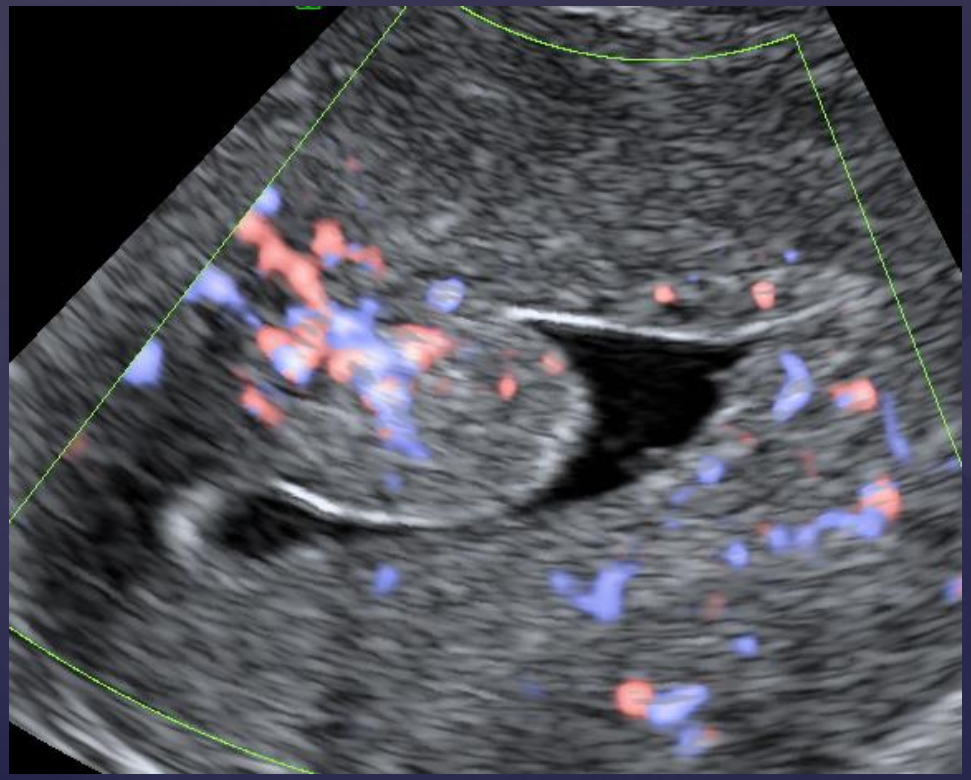


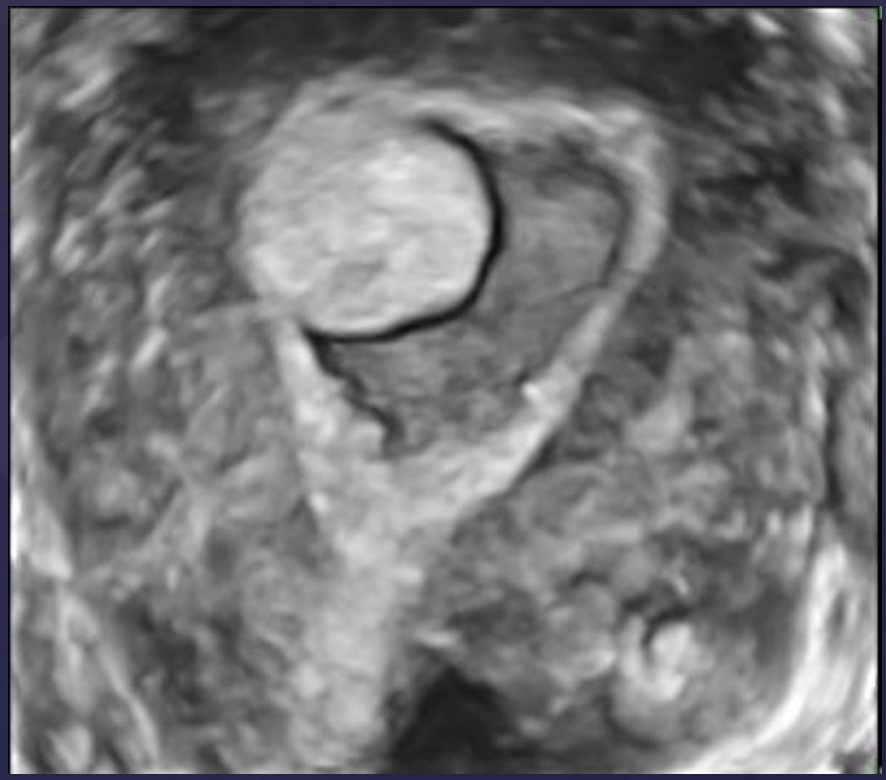


Precatheterization images as obtained and recorded in a patient with an endometrial polyp. The abnormality should be measured in at least 2 planes.



Postcatherization image of the same patient showing the site of polyp attachment to the uterine wall.



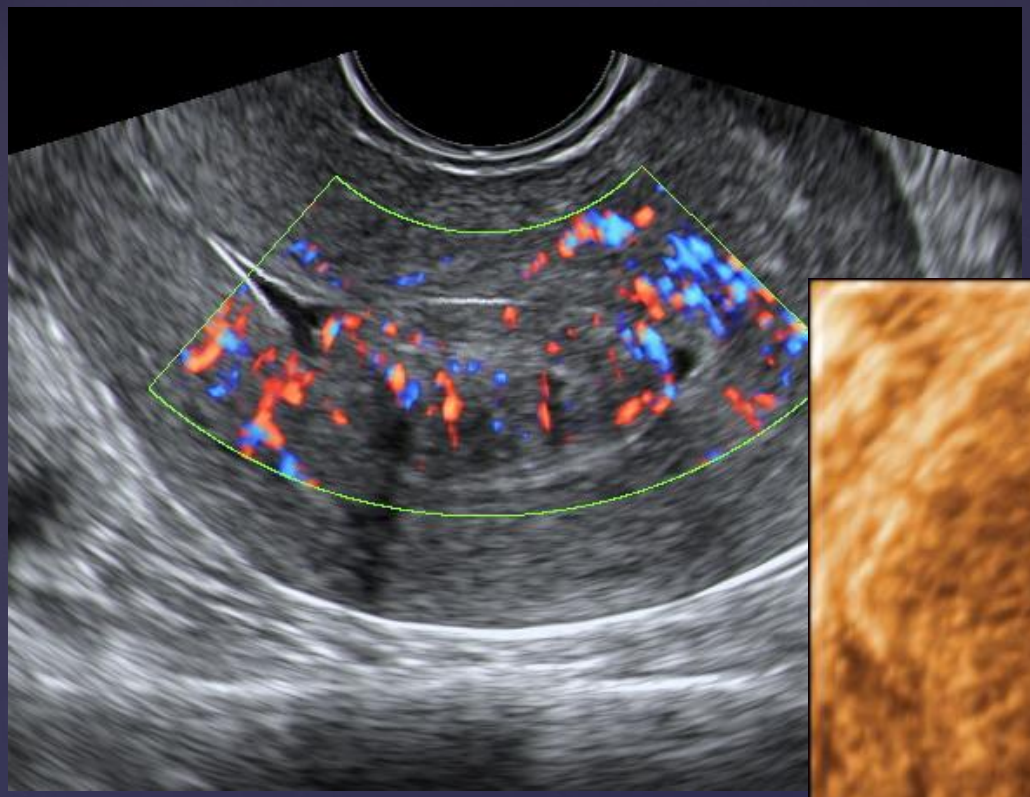


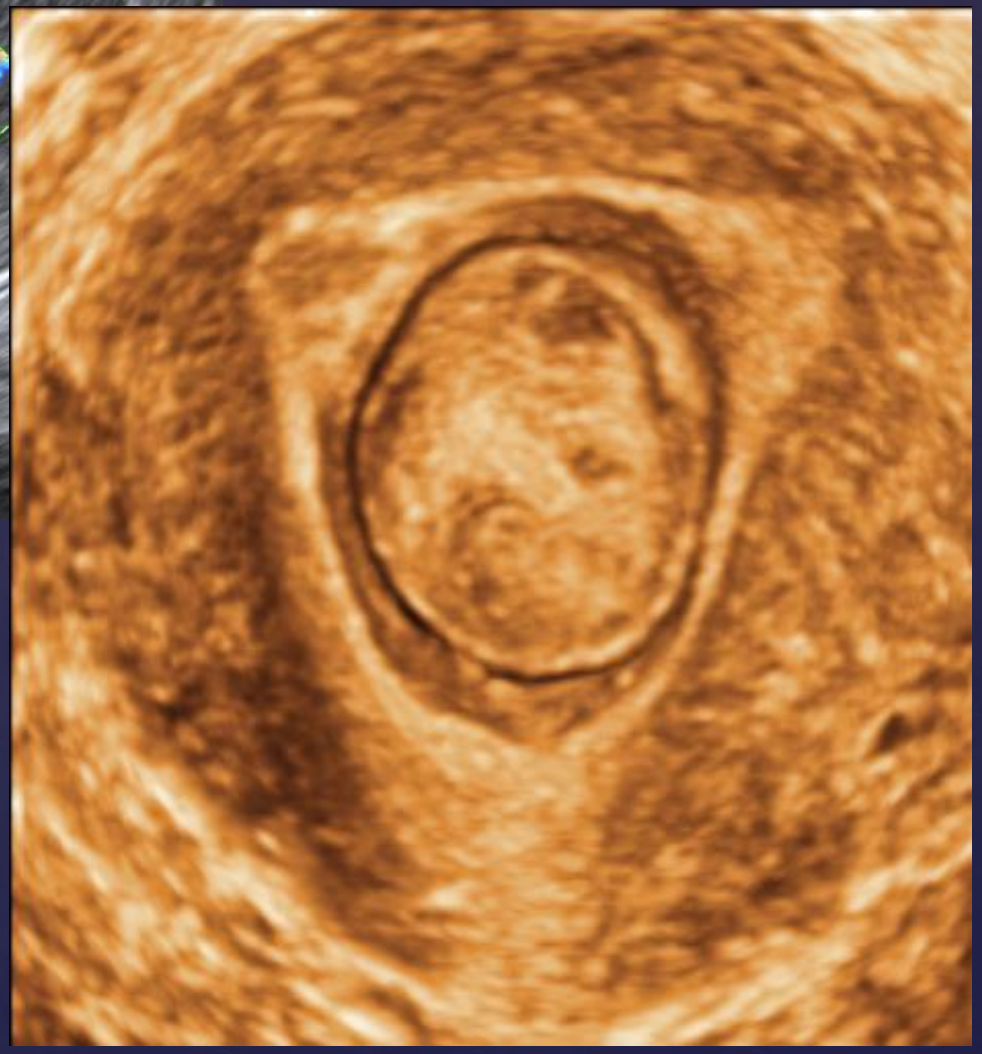
Additional techniques, such as color Doppler and 3D imaging, may be helpful.

Case Presentation 2

Retroverted uterus with a centrally located fibroid obscuring the endometrium.

Sonohysterography demonstrates the submucosal location of the fibroid. The endometrium was normal.

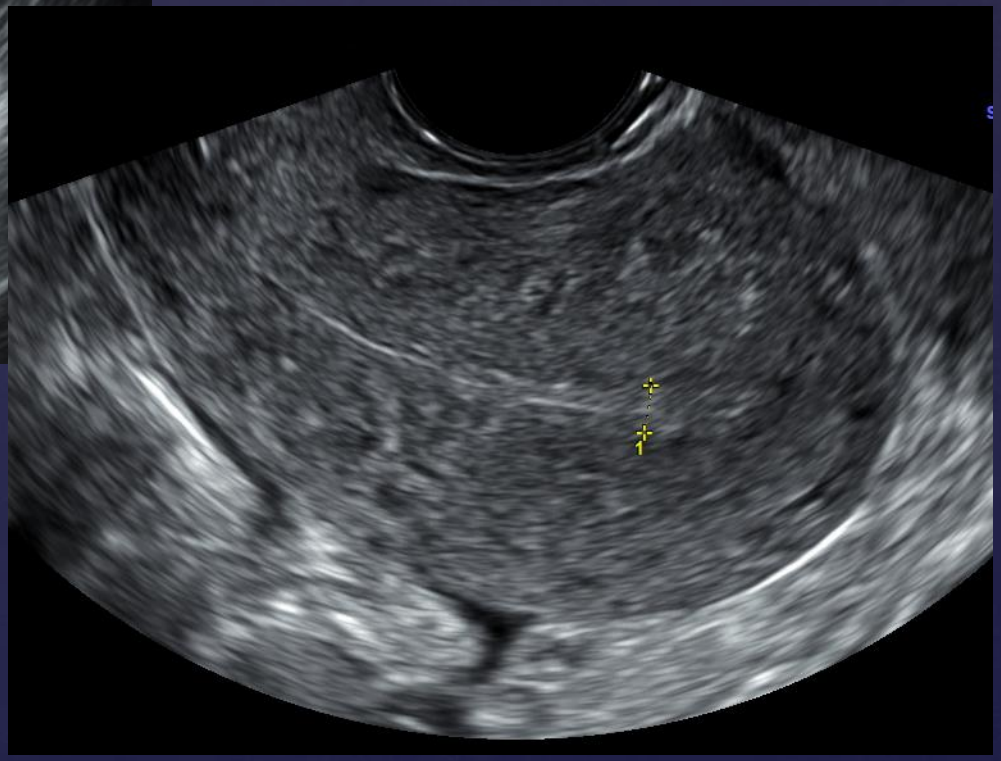


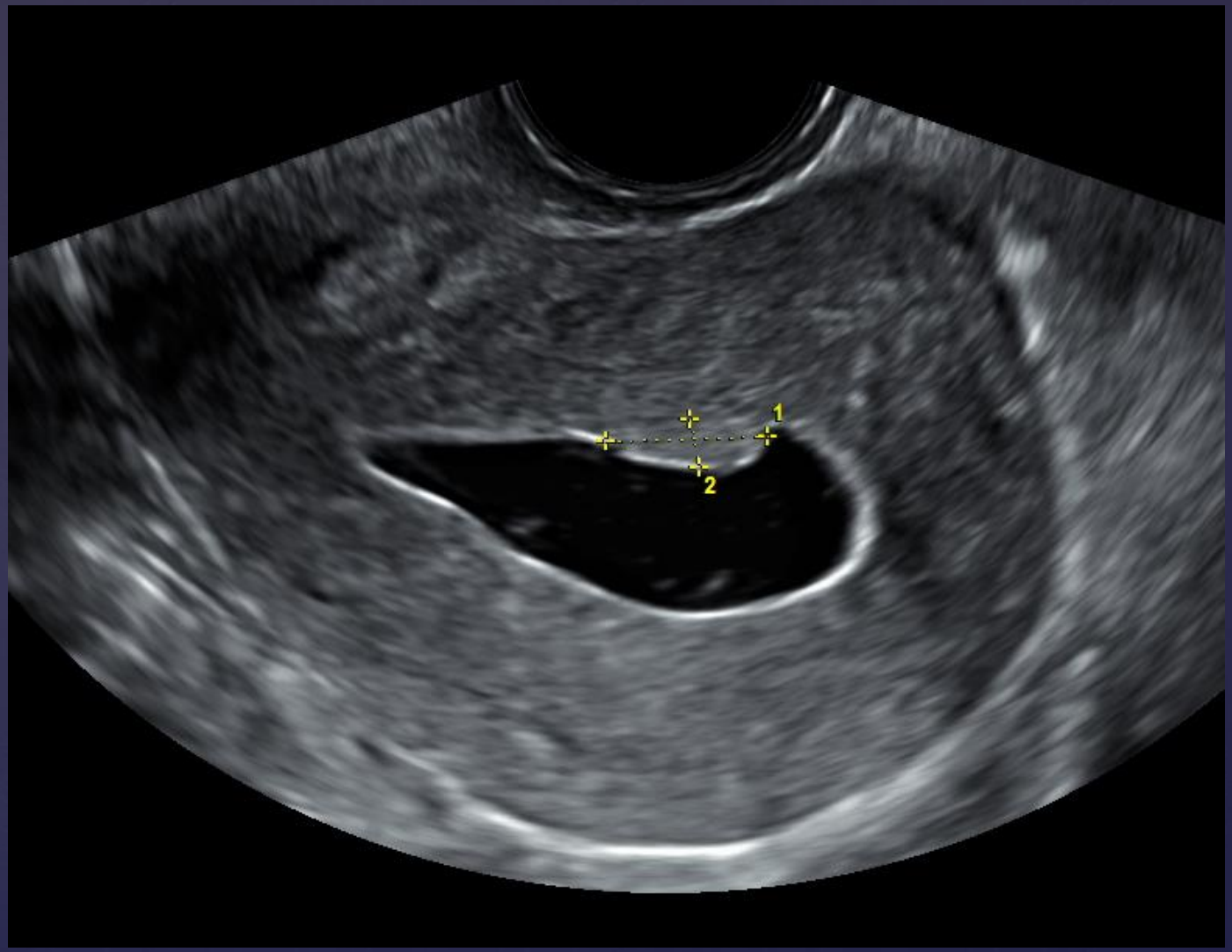


Color Doppler and 3D imaging aid in evaluating the fibroid.

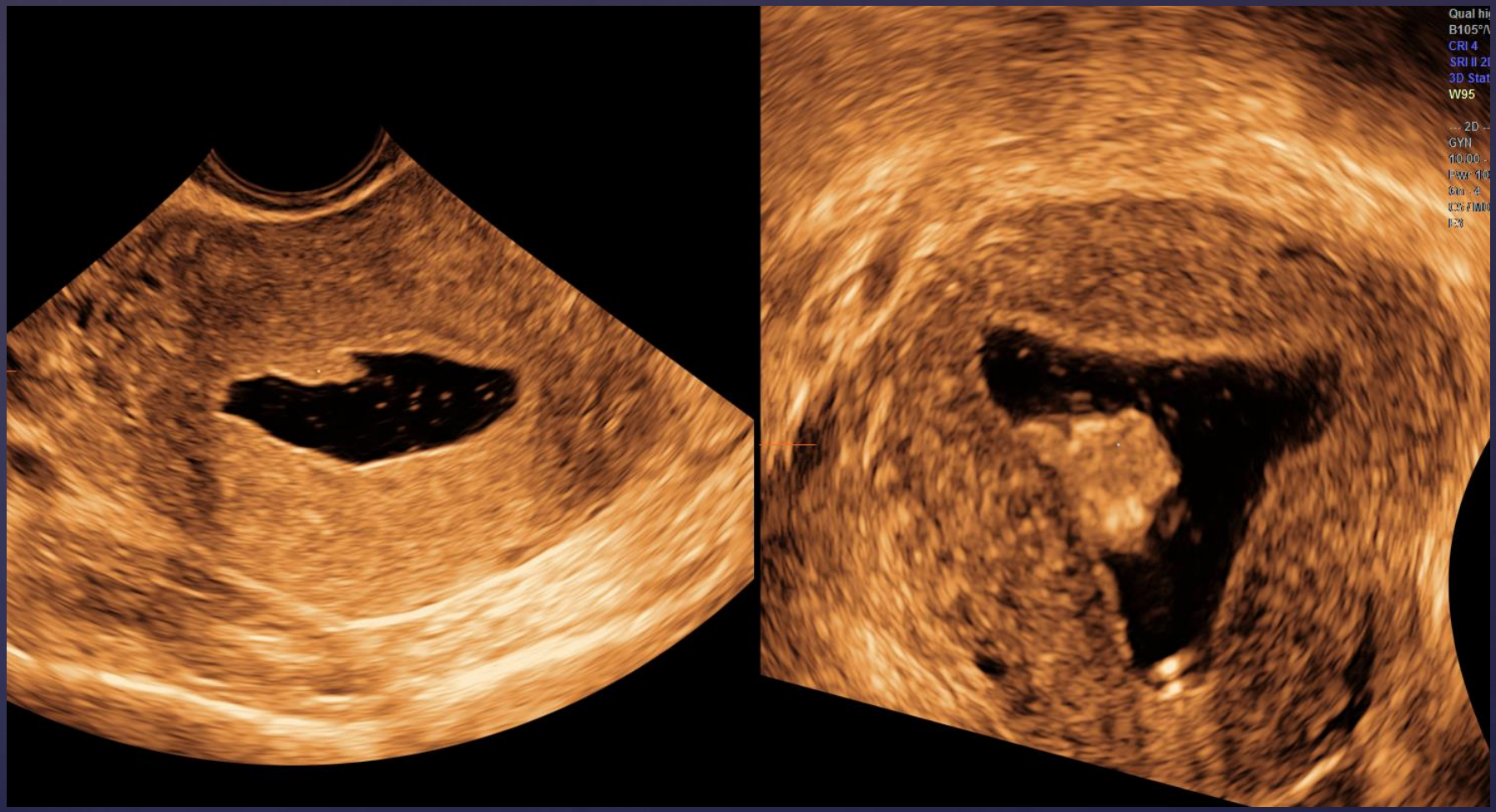
Case Presentation 3

Patient referred for irregular bleeding. Transvaginal exam of the uterus did not reveal any abnormalities of the endometrium.





Sonohysterography in the same patient reveals a small endometrial polyp.



3D evaluation demonstrating the polyp in the same patient as in prior 2 scans.

Case Presentation 4

Intrauterine adhesions (synechiae) demonstrated by sonohysterography.