

Evidence Discussion (PV 3)

- The initial work up of amenorrhea should include a physical exam, pregnancy test and hormonal work up. For those with a positive pregnancy test, imaging with appropriate obstetric ultrasound should be performed. Hormonal testing can help to further direct appropriate imaging^{1,2,3,4}.
- Transabdominal pelvic and/or transvaginal pelvic ultrasound are widely accepted as the initial imaging modality of choice for evaluation of amenorrhea^{1,2,3,4}. Ultrasound also allows for real-time evaluation with color and power Doppler which can help identify vascular flow and distinguish fluid and cysts from soft tissue¹. Additional benefits to ultrasound as a first line imaging modality include wide availability, fast access, and lack of ionizing radiation exposure.
- MRI is supported as an adjunct to inconclusive ultrasound imaging, especially if the ultrasound is suggestive of a congenital uterine or vaginal anomaly². CT is of limited use in the evaluation of amenorrhea given its suboptimal evaluation of the soft tissue of female pelvic organs.
- For suspected Asherman's syndrome, the gold standard for diagnosis remains hysteroscopy which has the added benefit of allowing for simultaneous treatment of adhesive disease^{5,6}. However, hysteroscopy carries with it risks of anesthesia and uterine perforation. Hysterosalpingogram (HSG) allows for simultaneous evaluation of tubal patency⁵. Sonohysterography (SHG) has a high negative predictive value (98%), but only a modest positive predictive value (43%)⁵. MRI may be a useful adjunct to HSG, SHG and hysteroscopy, especially in cases where there is complete obstruction of the endometrial cavity limiting the diagnostic ability of these tests^{5,6}.

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