

OBGYN-S07

Ultrasound for Uterine Sarcoma

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Uterine sarcomas are often only diagnosed postoperatively, making the challenge of achieving an accurate preoperative diagnosis a significant one. For gynecologists and obstetricians, ultrasound stands out as a highly convenient diagnostic tool, but like all tools, its effectiveness depends on understanding the hallmark signs to look for.

Common characteristics of sarcomas on ultrasound include large tumors that exceed 8 centimeters in size, ill-defined borders, and heterogeneous echogenicity. Additional features might encompass cystic changes, a notable absence or rarity of calcifications, and a lack of shadowing. These ultrasonographic features, when identified, should raise suspicion about the possibility of sarcoma.

Upon encountering suspicious findings on ultrasound, it is prudent to consider combining it with further diagnostic evaluations. Magnetic resonance imaging (MRI), for instance, can provide detailed information about soft tissue structures and might reveal features not easily discerned on ultrasound. In addition, various blood indices can offer clues regarding the malignancy and activity of the tumor.

In the current realm of medical diagnostics, the emphasis is on minimizing false negatives in sarcoma detection. By increasing the sensitivity of our diagnostic tools and approaches, we can make strides in timely and accurate detection of these malignancies. As we continue to harness the power of ultrasound in this field, its role remains pivotal in guiding further investigations and informing treatment decisions.

OBGYN-S08

Endometrial Pathology Diagnosis in Sonography: An Update

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Endometrial lesion sonographic evaluation has largely depended on measurements of endometrial thickness. However, recent studies have noticed several other features that are helpful. Here, we review the sonographic features of abnormal uterine bleeding and endometrial cancer.

OBGYN-S09

Ultrasound and Gynecological Oncology

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Pelvic ultrasonography is the primary imaging test for the evaluation of a variety of female pelvic symptoms and is often the first imaging test for the detection of gynecologic malignancies. Ultrasonography is particularly useful for assessing the thickness and appearance of the endometrium in patients with abnormal bleeding and for detecting and characterizing ovarian lesions. I present the sonographic appearance of the sonographic appearance of selected benign pelvic lesions that should not be misinterpreted as malignancy, and available sonographic imaging-based guidelines for the management of underlying gynecologic neoplasms.

OBGYN-S10

Application of Ultrasound in Urogynecology

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Structures of the lower genitourinary tract and pelvic floor can be visualized from different approaches: transperineal, introital, transvaginal, abdominal or endoanal. However, about surgical procedures, management of recurrences or complications, ultrasound may be proposed as the initial examination of choice. Ultrasound may be used for assessment of bladder neck mobility before anti-incontinence procedures. On rare occasions it can be helpful in recognition of pathologies mimicking vaginal prolapse such as vaginal cyst, urethral diverticula or rectal intussusception. In patients subjected to suburethral slings, causes of surgery failure or postsurgical voiding dysfunctions can be found by sonography. Otherwise, 3D ultrasound distinguishes in detail the pelvic organs, muscle, and fascial components possibly matching up to magnetic resonance image. 3D ultrasound has been used to identify the urethra, levator ani complex, prolapse, and surgical implants used in continence procedure or pelvic reconstruction surgery. Ultrasound has gained popularity in serving as a powerful tool to provide valuable information for physicians. There is a need to give an update on its clinical application in urogynecology.

OBGYN-S11

Ultrasound Examination of the Female Pelvic Floor. What is Normal?

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Ultrasound is a widely available tool that can provide real-time diagnostic information at the point of care. Pelvic floor ultrasound can help evaluate women with various pelvic floor disorders. Pelvic floor ultrasound provides a unique visualization of pelvic muscles and related structures, which can

help assess women with vaginal mesh complications, fecal incontinence, urinary symptoms, and symptoms related to childbirth. In addition, pelvic floor ultrasound can visualize deep pelvic support structures, including the muscles of the levator ani complex, urogenital hiatus, and minimal levator hiatus. The minimal levator hiatus is the shortest distance between the pubic symphysis and the levator plate. Correlation of both normal and abnormal with the patient's symptoms can improve treatment outcomes because the clinician can more effectively target the underlying anatomic problem.

OBGYN-S12

Evaluation of Urogynecologic Diseases by Using 2D/3D Sonography

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Ultrasound imaging into the evaluation of urogynecological patients dates back to the early 1980s. Despite significant developments in visualization techniques and interpretation of images, the role of ultrasound imaging in urogynecology is still not clearly defined. In many instances, including planning surgical procedures, management of recurrences or complications, ultrasound may be proposed as the initial noninvasive and helpful choice.

We can use different approaches: transperineal, introital, transvaginal, abdominal or endoanal, for assessment of bladder neck mobility, vaginal cyst, urethral diverticula or fistulae. In patients with suburethral slings, ultrasound can be used to reveal surgery failure or postsurgical voiding dysfunctions. Many reports link the location of a tape close to the bladder neck to unfavorable outcomes of sling surgery.