

- [17] Liu Y, Yang J, Tao L, et al. Risk factors of diabetic retinopathy and sight-threatening diabetic retinopathy: a cross-sectional study of 13 473 patients with type 2 diabetes mellitus in mainland China[J]. BMJ Open, 2017, 7(9):e016280.
- [18] Padilla A, Descorbeth M, Almeyda AL, et al. Hyperglycemia magnifies Schwann cell dysfunction and cell death triggered by PA-induced lipotoxicity[J]. Brain Res, 2011, 1370(1):64-79.
- [19] Callaghan BC, Cheng HT, Stables CL, et al. Diabetic neuropathy: clinical manifestations and current treatments [J]. Lancet Neurol, 2012, 11(6):521-534.
- [20] 何珊, 胡爱莲. 糖尿病视神经病变的研究进展[J]. 国际眼科纵览, 2021, 45(6):488-494.
- [21] Ding R, Liu Z, Tan J, et al. Advanced oxidation protein products mediate human keratinocytes apoptosis by inducing cell autophagy through the mTOR-Beclin-1 pathway[J]. Cell Biochem Funct, 2022, 40(8):880-887.
- [22] Wang L, Yu T, Dong F, et al. Tongqiao Mingmu formula alleviates retinal ganglion cell autophagy through PI3K/AKT/mTOR pathway [J]. Anat Rec (Hoboken), 2022 Sep 13, doi: 10.1002/ar.25060.

(收稿日期:2022-10-26)

• 病例报道 •

Ultrasonic manifestations of decidualized ovarian endometrioma cyst: a case report

蜕膜化卵巢子宫内膜异位囊肿超声表现 1 例

宋 勇 熊秀勤

[中图法分类号]R445.1;R711.71

[文献标识码]B

患者女, 34 岁, 因“停经 24 周, 发现盆腔包块 3 个月余”入院。自述 3 年前于外院行妇科超声体检未见明显异常。3 个月前于外院行妇科超声提示: 宫内早孕, 左附件区见一大小约 35 mm×28 mm 囊实性包块。实验室检查: 甲胎蛋白 (AFP) 5.8 U/ml, 糖类抗原 (CA) 125 53.4 U/ml。外院超声随访提示包块逐渐增大, 今于我院就诊。妇科超声检查: 左附件区见一大小约 75 mm×31 mm 囊实混合回声包块 (图 1), 边界清晰, 形态规则, 囊壁不光滑。囊壁见多个强回声突起, 较大者约 34 mm×30 mm; CDFI 示其内可探及较丰富血流信号 (图 2); 频谱多普勒测得阻力指数 0.28 (图 3)。超声提示: 左附件区囊实混合性包块, 卵巢囊腺瘤? 卵巢交界性肿瘤? 输卵管肿瘤? 肿瘤标志物检查: 人附睾蛋白 4 (HE4) 42.4 pmol/L, AFP 94.9 U/ml, CA125 42.1 U/ml。临床诊断: 妊娠 (24 周) 合并卵巢肿瘤? 输卵管肿瘤? 遂行手术切除治疗, 术中见子宫孕 6 月大小; 左侧附件暴露较困难, 与盆壁粘连, 暴露过程中见左附件区包块破裂, 流出咖啡色囊液; 左侧卵巢增大, 大小约 9 cm×5 cm×4 cm, 部分表面尚光滑, 其内见一直径约 7 cm 包块; 左侧输卵管走行迂曲, 伞端黏膜红润。分离左侧附件与盆壁粘连处, 见左侧卵巢囊包块内壁较多菜花样组织, 质脆, 左侧盆壁与卵巢粘连部分亦为菜花样组织, 行患侧附件及肿物切除术。术后病理诊断: 卵巢子宫内膜异位症并间质蜕膜 (图 4)。

讨论: 妊娠期时, 卵巢子宫内膜异位囊肿 (endometrioma cyst, EMT) 在孕激素的作用下, 异位的内膜间质细胞出现过度增生, 可导致囊肿增大及其内形成血管化的乳头状突起或实性隆起物, 称之为卵巢 EMT 的“蜕膜化”改变。蜕膜化卵巢 EMT 临床少见, 其典型的超声表现为单房或多房囊肿内出现圆形血管化的乳头状突起或大范围的低回声实性隆起, 边缘光滑, 囊腔内液体呈毛玻璃样或呈低回声, 突起内血流信号丰富^[1]。本例患者超声表现为左附件区囊实混合回声包块, 边界清晰, 形态规则, 囊壁可见多个强回声突起, 其内可探及较丰富血流信号。分析本例患者误诊原因: 患者数年前妇科超声检查未见异常, 妊娠后随访发现左附件区包块逐渐增大, 囊壁内多发血供丰富的突起, 且突起物血流阻力指数较低; 加之本病临床少见, 超声医师对其认识不足, 缺乏经验。本病需与卵巢交界性或恶性肿瘤鉴别^[2], 蜕膜化卵巢 EMT 在妊娠状态下出现, 有卵巢 EMT 病史, 且囊腔内的乳头状突起边缘光滑, 形态规则; 卵巢交界性或恶性肿瘤的乳头状突起边缘不光滑, 形态欠规则^[3]。但蜕膜化卵巢 EMT 表现不典型时, 超声难以鉴别。HE4 与卵巢恶性肿瘤相关^[4], 本例患者 HE4 表达呈阴性, 在一定程度上可排除卵巢恶性肿瘤。MRI 及弥散加权成像可用于蜕膜化卵巢 EMT 与卵巢恶性肿瘤的鉴别^[5]。总之, 蜕膜化卵巢 EMT 易误诊, 导致不必要的手术干预, 故对其诊断时不能局限于超声图像的分析, 应

(下转第 531 页)

- AATS/PCNA/SCAI/STS focused update of the guideline for the diagnosis and management of patients with stable ischemic heart disease: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines, and the American Association for Thoracic Surgery, Preventive Cardiovascular Nurses Association, Society for Cardiovascular Angiography and Interventions, and Society of Thoracic Surgeons[J]. J Thorac Cardiovasc Surg, 2015, 149(3):5-23.
- [7] Lang RM, Badano LP, Mor-Avi V, et al. Recommendations for cardiac chamber quantification by echocardiography in adults: an Update from the American Society of Echocardiography and the European Association of, Cardiovascular Imaging [J]. Eur Heart J Cardiovasc Imaging, 2016, 17(4):412.
- [8] Zhou M, Wang H, Zeng X, et al. Mortality, morbidity, and risk factors in China and its provinces, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017[J]. Lancet, 2019, 394(10204): 1145-1158.
- [9] 江业慧, 张平洋, 冉红, 等. 基于 AFI 的无室壁运动异常冠心病患者左室心肌运动及其与冠脉狭窄程度间关系的研究[J]. 中国超声医学杂志, 2020, 36(2): 125-128.
- [10] Dogdus M, Simsek E, Cinar CS. 3D-speckle tracking echocardiography for assessment of coronary artery disease severity in stable angina pectoris[J]. Echocardiography, 2019, 36(2):320-327.
- [11] 刘杰, 刘巧志, 肖圣珏, 等. 单光子发射计算机断层显像左室舒张功能参数评估冠心病患者左室舒张功能的临床价值研究[J]. 中国全科医学, 2022, 25(29):3646-3651, 3657.
- [12] Wang K, Ho SY, Gibson DG, et al. Architecture of atrial musculature in humans[J]. Br Heart J, 1995, 73(6):559-565.
- [13] 刘瑞中, 王飞, 赖玉琼. 三维斑点追踪成像评估左房功能的研究进展[J]. 临床超声医学杂志, 2020, 22(6):455-457.
- [14] Said KM, Nassar AI, Fouad A, et al. Left atrial deformation analysis as a predictor of severity of coronary artery disease[J]. Egypt Heart J, 2018, 70(4):353-359.
- [15] 徐瑞, 袁建军, 张喜君, 等. 实时三维超声自动定量与磁共振评价急性心肌梗死患者左心房容积及功能的对照研究[J]. 中华超声影像学杂志, 2021, 30(5):382-387.
- [16] Stefanadis C, Dernellis J, Tsiamis E, et al. Effects of pacing-induced and balloon coronary occlusion ischemia on left atrial function in patients with coronary artery disease[J]. J Am Coll Cardiol, 1999, 33(3):687-696.
- [17] 张子慧, 孙玉伟, 李劼, 等. 斑点追踪成像评价冠状动脉不同狭窄程度冠心病患者左室心肌收缩功能的研究[J]. 临床超声医学杂志, 2019, 21(5):340-344.

(收稿日期:2022-09-01)

(下转第524页)

进一步了解患者病史,同时结合血清学及MRI检查综合评估。

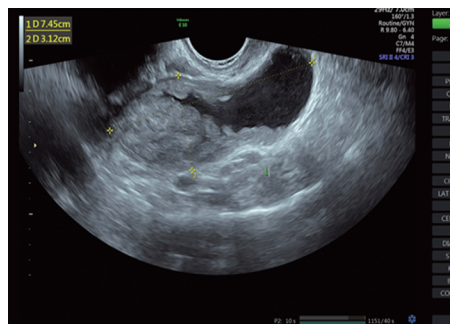


图1 二维超声示左附件区见一大小约75 mm×31 mm囊实混合回声包块

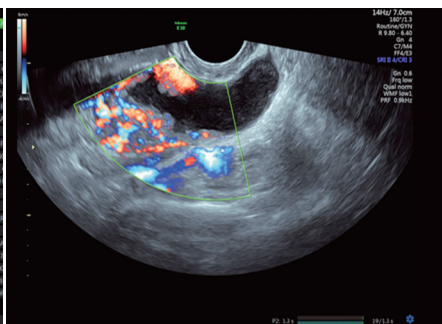


图2 CDFI示左附件区包块内囊壁的强回声突起可探及较丰富血流信号

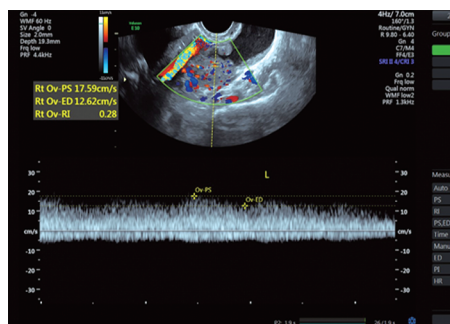


图3 频谱多普勒示左附件区包块内囊壁的强回声突起的血流阻力指数为0.28

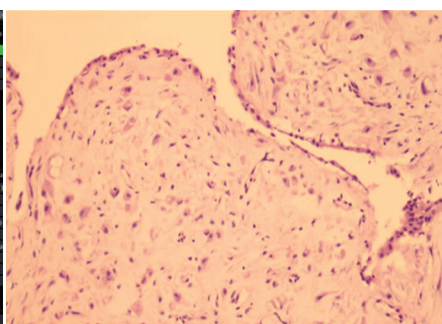


图4 病理示卵巢子宫内膜异位症并间质蜕膜(HE染色,×100)

参考文献

- [1] Mascilini F, Moruzzi C, Giansiracusa C, et al. Imaging in

gynecological disease. 10: clinical and ultrasound characteristics of decidualized endometriomas surgically removed during pregnancy[J]. Ultrasound Obstet Gynecol, 2014, 44(3):354-360.

- [2] Kiyak H, Seckin KD, Karakis L, et al. Decidualized juvenile cystic adenomyoma mimicking a cornual pregnancy [J]. Fertil Steril, 2020, 113(2):463-465.
- [3] Mascilini F, Savelli L, Scifo MC, et al. Ovarian masses with papillary projections diagnosed and removed during pregnancy: ultrasound features and histological diagnosis [J]. Ultrasound Obstet Gynecol, 2017, 50(1):116-123.
- [4] Gasiorowska E, Kluz T, Lipski D, et al. Human epididymis protein 4 (HE4) reference limits in Polish population of healthy women, pregnant women, and women with benign ovarian tumors [J]. Dis Markers, 2019, 2019(1):3890906.
- [5] Takeuchi M, Matsuzaki K, Harada M. Computed diffusion-weighted imaging for differentiating decidualized endometrioma from ovarian cancer [J]. Eur J Radiol, 2016, 85(5):1016-1019.

(收稿日期:2022-09-23)