

Quantitative analysis of venous contrast-enhanced ultrasound in misdiagnosis of spontaneous rupture of giant mucinous cystadenocarcinoma of the ovary.

Zeqi CHEN, Ying Cheng, Min Zhu, Xiao-Yue Zhao, Li Xu, Jin-Qin Zhan, Ling-Yu Shen, Jia-Min Zhang

Case information

Patient, female, 44 years old, complained: "Sudden lower abdominal pain without obvious cause for more than 1 day". TVS showed a 10.0×7.8×3.8cm mixed cystic-solid mass in the right adnexal area with an irregular shape and a cyst wall thickness of about 2cm; CDFI showed abundant blood flow signals on the wall (Fig. A), and PW showed arterial spectrum, PSV=25cm/s, RI=0.43; and moderate amount of ascites. Ultrasound suggests: With possible rupture of borderline ovarian tumor. Quantitative analysis of venous contrast-enhanced ultrasound suggests: Ovarian cyst rupture and corpus luteum rupture to be differentiated (Fig. B). Pathological findings show: borderline mucinous cystadenoma with partial canceration (Fig. C)

Conclusion

Mucinous ovarian cancer (MOC) combined with spontaneous rupture is extremely rare. The reasons for misdiagnosis in this quantitative analysis of contrast-enhanced ultrasound are as follows: 1. MOC with spontaneous rupture is extremely rare; 2. MOC is heterogeneous, and three components: benign, borderline, and malignant can exist in the same tumor. 3. The patient's first ultrasound examination and contrast-enhanced ultrasound were not performed by the same doctor, the sampling points were different, and the time difference of 6 hours caused the rupture of the cyst to continue to decrease in tension and the cyst wall to shrink, which strongly affected the blood perfusion of the cyst wall.

