

Quantitative analysis of contrast-enhanced ultrasound in the diagnosis of stage IIIC fallopian tube carcinoma with negative vaginal discharge.

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

Case information

The patient, female, 63 years old, was 12 years menopausal, had no abnormal vaginal bleeding, and had paroxysmal lower abdominal pain for more than 3 months. TVS showed a 6.0×2.4cm solid mass in the right adnexal area with an irregular shape; CDFI showed abundant blood supply (Fig. 1A), with PW elicited arterial spectrum, PSV=27cm/s, RI=0.52; and uneven thickening of the pelvic wall (Fig. 1C), with the thickest part being about 1.3cm, and CDFI showed abundant blood supply. Moderate amounts of ascites. Combined with quantitative analysis by contrast-enhanced ultrasound, it is suggested that fallopian tube Ca is possible (Fig. 1B). Tumor lesions were considered on MRI (Fig. 2A, B). The pathological examination results show: high-grade serous carcinoma of the fallopian tube (Fig. 2C).

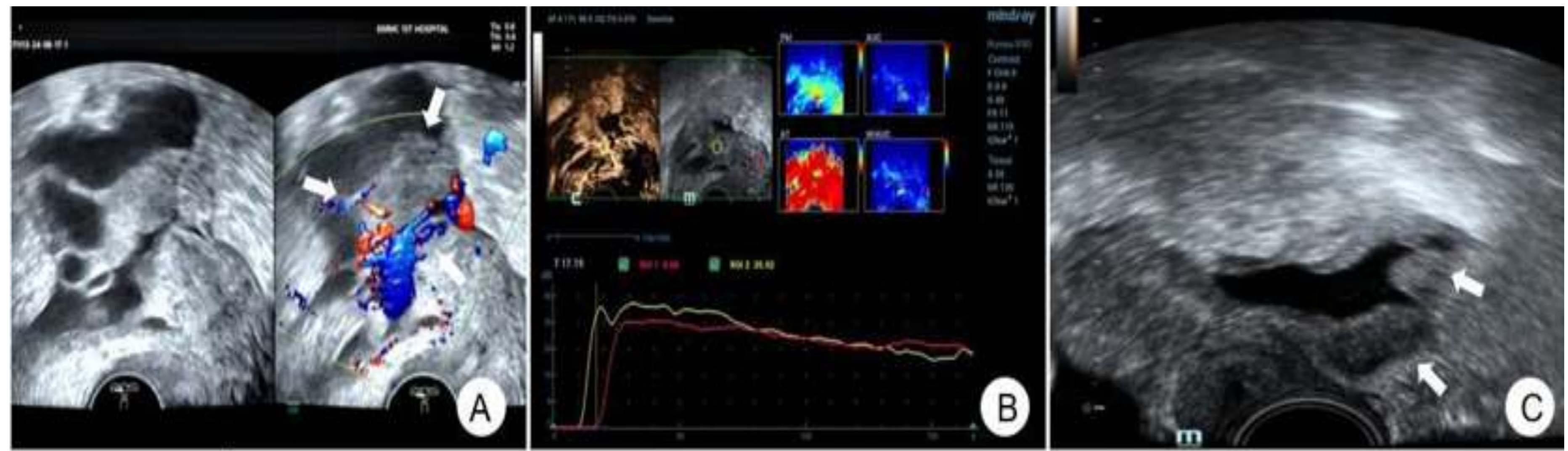


figure 1

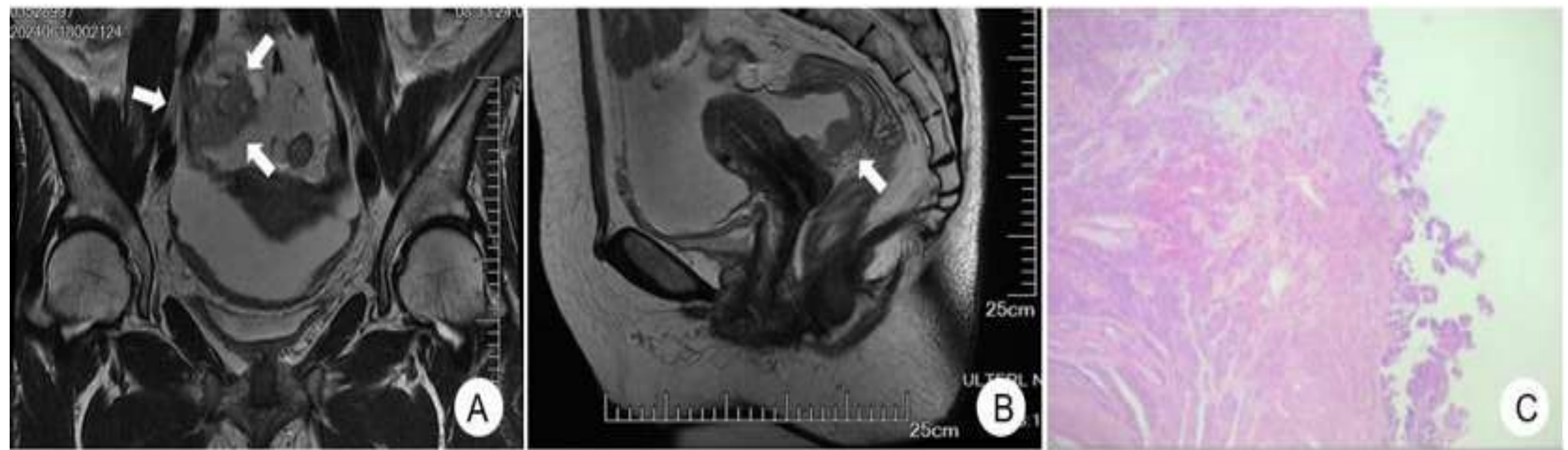


figure 2

Conclusion
Rare PFTC, whose diagnosis by quantitative analysis of CEUS was first reported. In this case, the characteristic "Latzko triad" of fallopian tube cancer is lacking, and the ultrasound contrast shows early enhancement, high enhancement, and early regression. Combined with the patient's abdominal pain symptoms, it is easy to be confused with acute inflammatory lesions. We selected areas with a relatively rich blood supply and a low resistance index at the lesion site as the targets for observation. To reduce the strong influence of blood perfusion on individual differences in heart rate and vascularity, we compared the differences in the two focus areas (PId and ASd) with the cutoff values, which were 5.19 and 0.27, respectively, significantly higher than the cutoff values of 4.47 and 0.097. The final diagnosis was fallopian tube cancer.