

The “hourglass sign” in mesonephric-like endometrial carcinoma: an unusual ultrasound finding

Francesca Moro¹, Elena Teodorico¹ , Mariangela De Simone¹, Antonio D'Amati¹ , Federica Pozzati¹, Antonia Carla Testa¹

1. Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Rome, Lazio, Italy.

Introduction

Mesonephric-like carcinoma (MLA) of the endometrium is a rare, recently recognized subtype of endometrial carcinoma with aggressive clinical behavior. Because of its rarity, the ultrasound characteristics of this tumor remain poorly described.

Case presentation

A 49-year-old postmenopausal woman with no relevant past medical history presented with abnormal uterine bleeding.

Transvaginal ultrasound revealed an endometrial lesion measuring 43×14×13 mm extending toward the external uterine ostium. According to the International Endometrial Tumor Analysis (IETA) terminology, the lesion showed non-uniform echogenicity, an irregular endometrial–myometrial junction, with stromal cervical infiltration, and a color score of 2-3. This lesion showed a characteristic “hourglass” appearance. Furthermore, in the antero-isthmic region, a solid mass measuring 19×16×14 mm with moderate vascularization was identified, and a solid lesion with irregular margins

and heterogeneous echostructure was detected in the right adnexal region (color score 3). The patient underwent radical surgery, and final histology confirmed MLA of the endometrium with cervical and adnexal metastases.

Discussion

MLAs are known to frequently involve the cervix, often as skip metastases distant from the primary tumor. This case highlights both cervical stromal metastasis and a previously undescribed ultrasound feature, termed the “hourglass sign”.

Conclusion

This case highlightes the role of ultrasound in assessing disease extent in endometrial cancer. MLAs tend to present frequent cervical stromal involvement, with the possibility of showing an “hourglass appearance”. Integration of imaging findings with molecular and immunohistochemical classification is essential for accurate diagnosis of mesonephric-like adenocarcinoma.

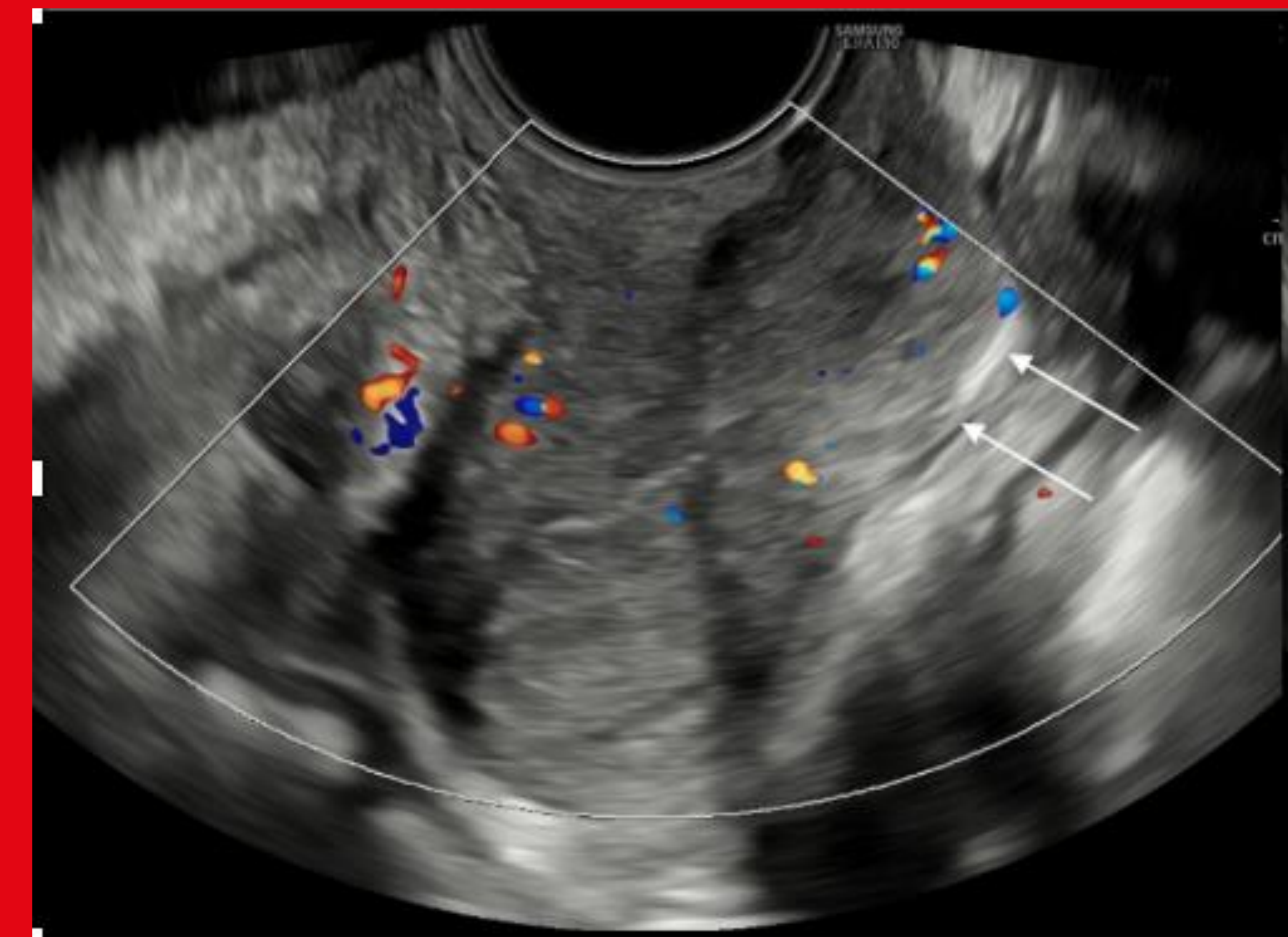
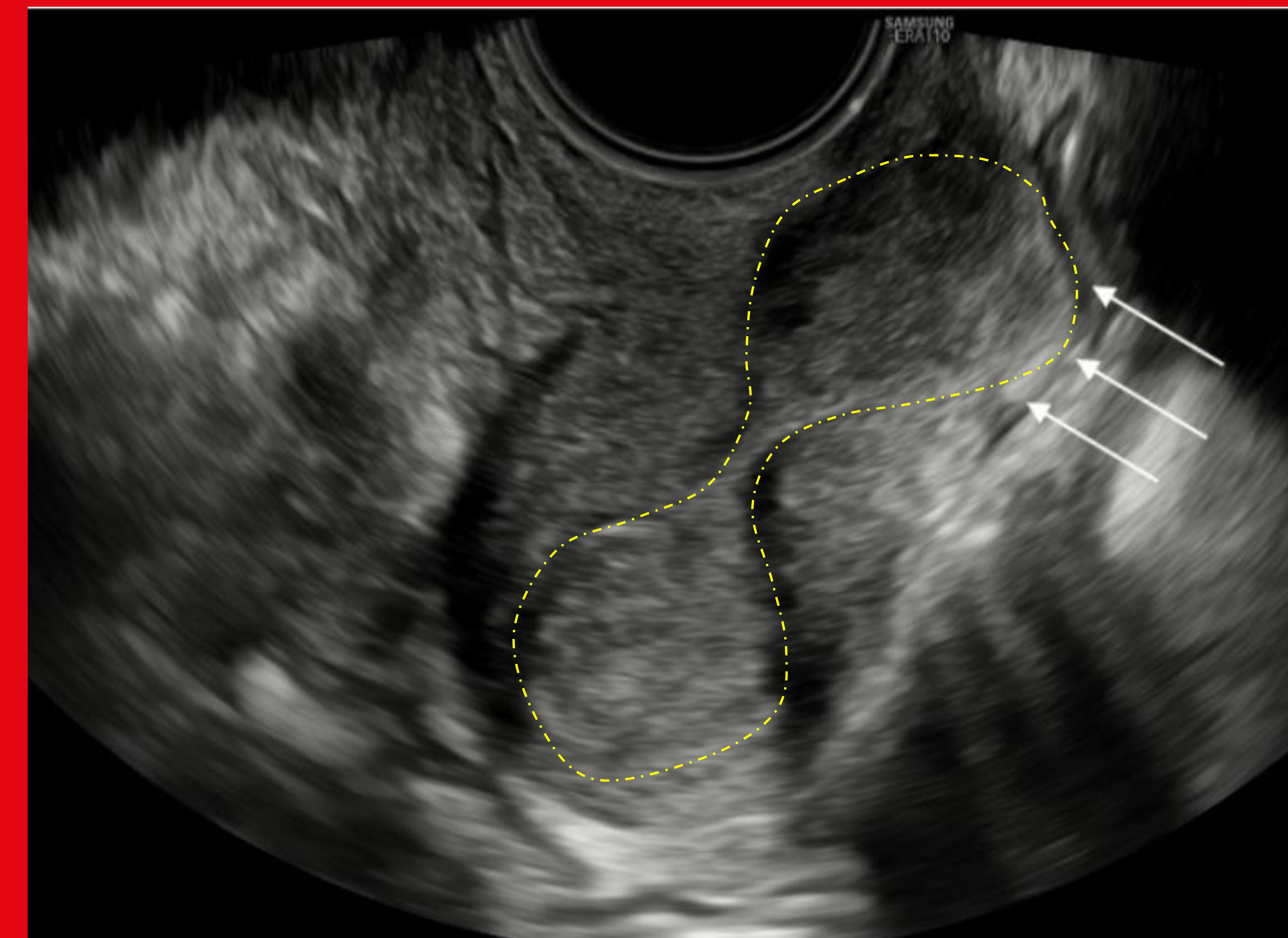


Figure 1. Grey-scale and color Doppler images of the endometrial lesion (MLA) with a characteristic “hourglass” appearance