Introduction
The ultrasound presentation of endometrial disorders varies from mild to bizarre complex masses. Mild looking masses resembling polyps may turn out to be endometrial cancer, which is the most common malignancy of the female genital tract in developed countries. We present a case whose ultrasound findings are challenging.

Case report
Patient is a 37-year-old Chinese female, presenting with menorrhagia with symptomatic anaemia. She had a history of a previous benign endometrial polyp removed 7 years ago, followed by endometrial hyperplasia which reversed with progestogen treatment. Transabdominal (TA) Ultrasound scan 2 years earlier then showed a 108ml uterus with features of adenomyosis and small fibroids. Upon presenting with a fresh complaint of heavy menstrual bleeding, she was given more progestogenic treatment, to no avail.

TA and transrectal (TR) scans were performed. Uterus was enlarged with a globular contour, 292 ml. Endometrial outline appeared vague. Small amount of fluid was seen within lower endometrial cavity. A heterogeneous ‘mass’ composing of echogenic as well as hypoechoic areas was demonstrated encompassing the endometrium. Its measurements were 6.9 x 6.4 x 6.3 cm. The heterogeneous ‘mass’ appeared to be confluent with anterior and posterior endometrium at endometrio-myometrial junction. Colour and Power Doppler detected some intratumoral flow, including large venous flow. A diagnosis of severe adenomyosis with possible endometrial disorders was made.

4 months later: The uterus enlarged further to 177ml. A 6.6 x 4.7 x 5.5 cm ill-defined heterogeneous area/mass was noted occupying the mid and upper corpus. It appeared to be confluent with anterior and posterior endometrium at endometrio-myometrial junction. Colour and Power Doppler detected moderate intratumoural flow, PSV-29 cm/s, PI-1.24,RI=0.67. In addition, a 2.9 x 0.5 x 1.4 cm avascular echogenic area was seen in the upper and mid endometrial cavity, and appeared inseparable from the above mentioned ‘mass’.

MRI showed that the endometrial lining was heterogeneous and nodular in appearance without a discrete endometrial mass. The junctional zone was thickened with ill-defined margins, most likely representing adenomyosis. Hysteroscopic assessment was arranged.

Intraoperative findings:
Enlarged uterus 12/52, cavity length 10cm, poor visualization due to large old blood clots and patient was menstruating. A degenerated fibroployp.

Histopathological findings:
Inactive endometrium with pseudodecidualized stroma, in keeping with progestogen effect. Fragments of submucosal leiomyoma. No endometritis, endometrial hyperplasia or malignancy.

Conclusion
Although the Doppler did not detect worrying signals, there was concern about the abnormally thickened endometrial-myometrial junction. While the diagnosis of severe adenomyosis was clear, the progestogenic treatment may have caused the excessive growth and changes in endometrium. The degenerated fibroployp had probably also contributed to the bizarre appearance on ultrasound images.