Introduction
To assess inter- and intra-observer variability of uterine vein diameter measurements and venous blood-flow pattern assessment using transvaginal Doppler ultrasound.

Methods
Inter-observer variability was tested by two observers who carried blinded independent real-time examinations of 30 women. Intra-observer variability was assessed by re-examining stored images. Uterine vein diameter (UVD) was measured on frozen B-mode ultrasound. Venous flow pattern was classified subjectively using Colour/pulsed Doppler as continuous (Type 1) and intermittent (Type 2).

Results
There was good level of agreement for inter- (Fig 3, 4) and intra-observer variability. Intra-observer variability mean and LOA: Right UVD, -0.04mm (LOA -0.29mm to 0.21mm), left UVD 0.01mm (LOA -0.30mm to 0.28mm. Agreement was excellent for assessing venous blood-flow pattern (Inter-observer $\kappa = 0.839$ for right vein; $\kappa = 1$ for left vein; Intra-observer $\kappa = 0.814$ for right vein; $\kappa = 0.870$ for left vein).

Conclusion
This study has demonstrated that transvaginal ultrasound measurements of the uterine vein diameter and blood-flow pattern in the main uterine vein are reproducible and could be used as a tool for studies of physiological and pathological changes in uterine venous circulation.