Introduction
To evaluate the role of a new ultrasound sign named “intracervical lakes” in predicting the outcome of PAS disorders.

Methods
Retrospective multicentric study including all women with placenta previa >26 weeks of gestation. Intracervical lakes, defined as tortuous anechoic spaces within the cervix hyper-vascular at Colour Doppler using a PRF < 1.3 KHz (Figure 1 and 2) were searched in all included women. The primary aim was to explore the diagnostic accuracy of this sign in detecting the presence and the depth of PAS disorders. The secondary aim was to explore the accuracy in predicting total estimated blood loss; antepartum bleeding; postpartum haemorrhage at the time of Caesarean Section; need for Caesarean hysterectomy.

Results
332 women were included. Intracervical lakes were noted in 15.5% of them. At logistic regression analysis, intracervical lakes were independently associated with major post-partum haemorrhage (OR 3.3; 95% CI 1.6-6.51; p<0.001), hysterectomy (OR 7.02; 95% CI 2.06-23.9; p<0.001), placenta percreta (OR 2.78; 95%CI 1.34-5.77; p=0.004). The association of at least one “typical” sign of PAS and intracervical lakes had an OR of 217.17 (95% CI 27.69-1703.39; p<0.001) for placenta percreta and of 687.37 (95% CI 121.37-3892.87; p<0.001) for Caesarean hysterectomy.

Conclusion
Intracervical lakes may represent a marker of deep villus invasiveness in women with suspected PAS at antenatal sonography and anticipate the occurrence of severe maternal morbidity.