

Leaving the placenta in situ (LIPS) for the management of placenta accreta spectrum (PAS): Ultrasound Surveillance.

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Objective

- Leaving the placenta in situ (LIPS) after cesarean section (CS) can be an alternative management strategy for women with placenta accreta spectrum (PAS). Delayed hysterectomy 6–8 weeks after CS may reduce the risk of intraoperative bleeding, while expectant management until spontaneous placental resorption or expulsion may offer an option for uterine preservation.
- We aimed to describe ultrasound (US) findings during follow-up of women undergoing LIPS, and identify US parameters predictive of TSV bleeding resulting in an unscheduled hysterectomy (UN-HYST).

Study Design

- 63 women with PAS undergoing LIPS. US follow-up was conducted every 2 weeks until delayed HYST, or placenta reabsorption/expulsion.
- US surveillance included: quantitative vascularization (QV: percentage of color pixels in the complete uterus/placenta obtained in a midline plane using standard Doppler settings), uterine artery (UtA) Doppler indices, uterine volume, placental thickness and attachment, and intrauterine blood collection.

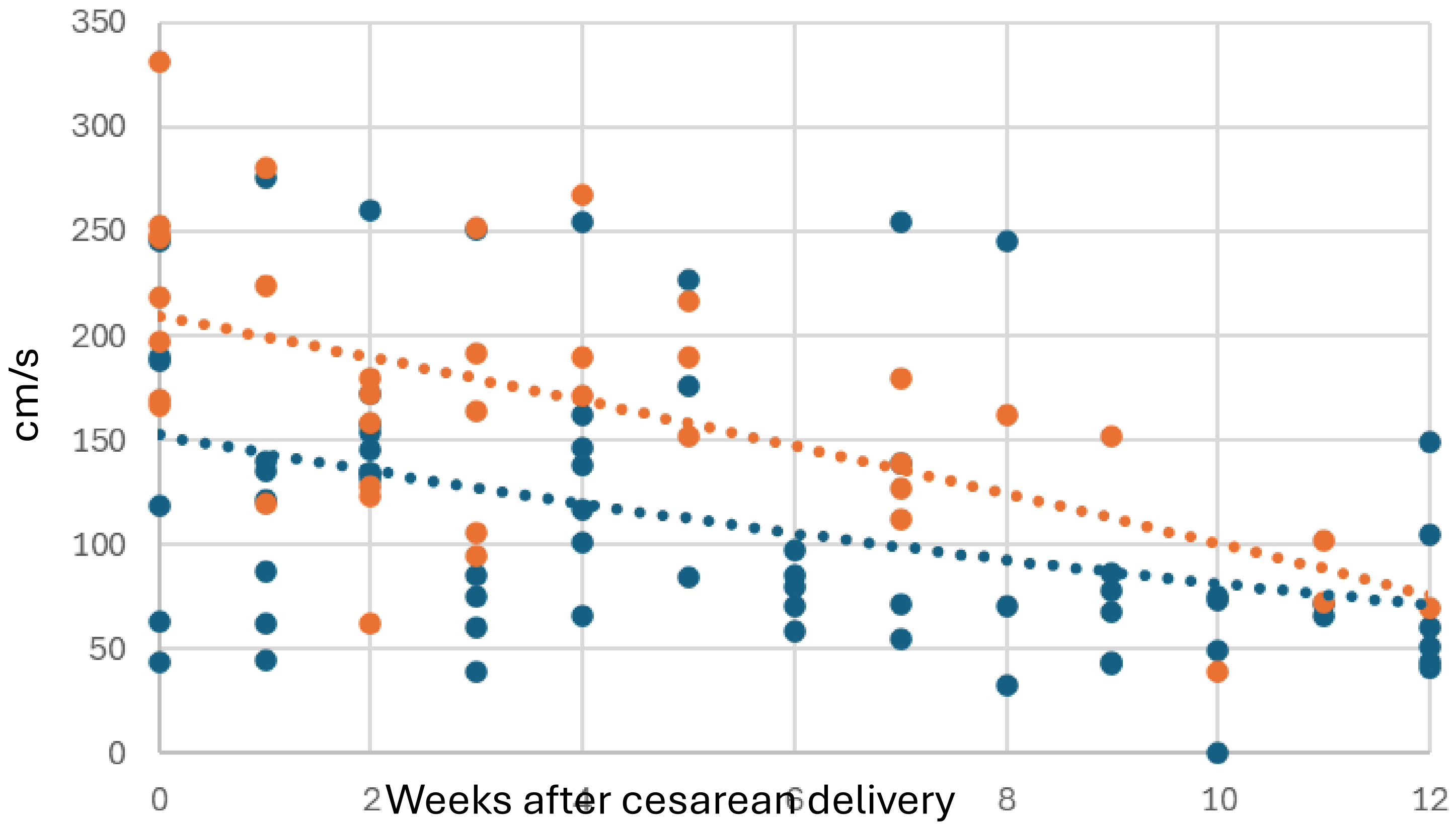


Fig 1 Mean uterine arteries peak systolic velocity after cesarean section in women with successful management and those having an unscheduled hysterectomy due to bleeding, pain, or infection

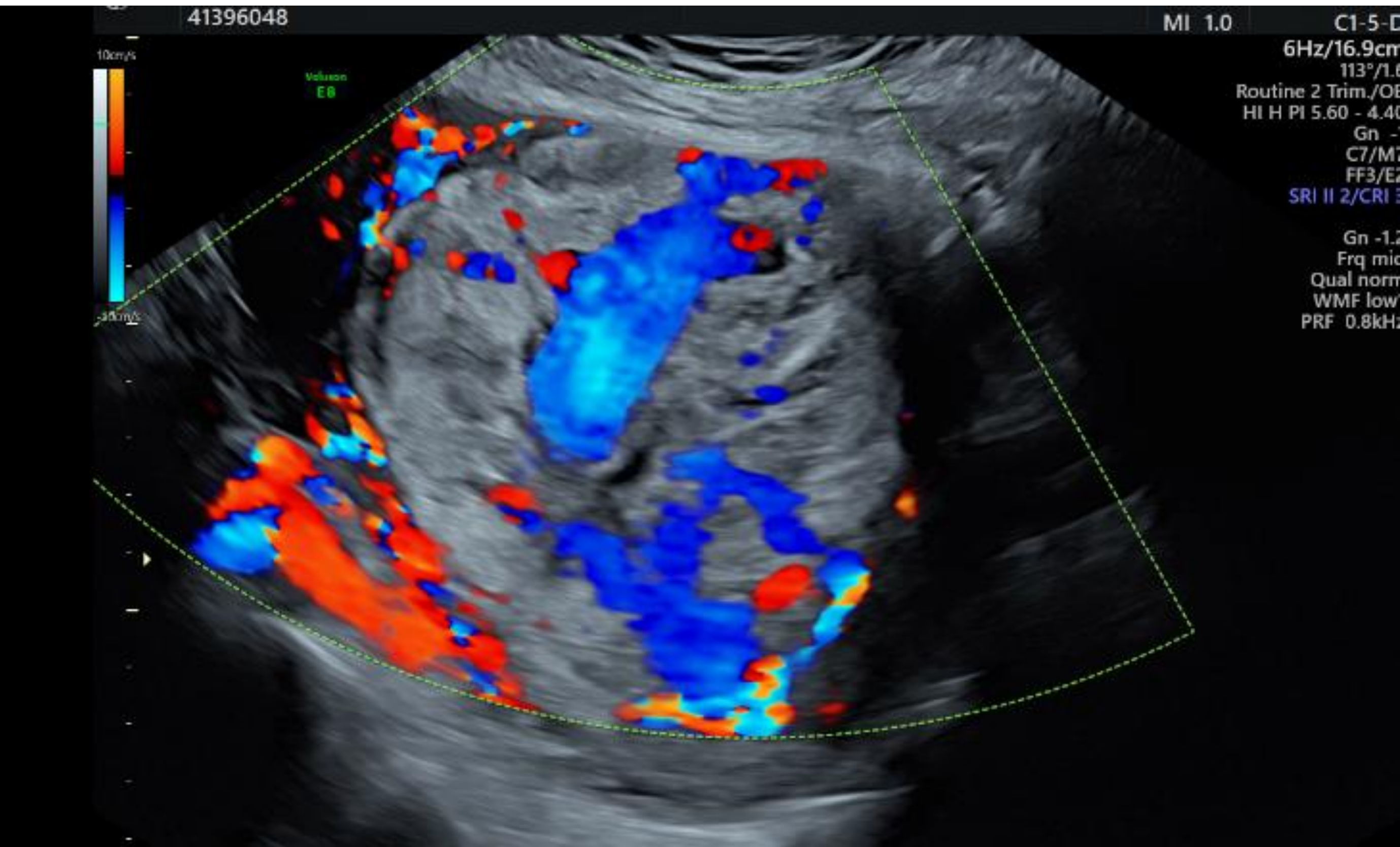


Fig 2 Increased placenta vascularization and a big feeding artery in a patient with transvaginal bleeding requiring unscheduled hysterectomy 8 weeks after cesarean section.



Results

- Delayed HYST was scheduled for 26 patients; 7 had UN-HYST due to bleeding.
- 37 opted for placenta reabsorption/expulsion; 20 were successful, 17 had UN-HYST due to: patient choice (n=8), bleeding (n=6), pain (n=1), or infection (n=2).
- In all patients, progressive decrease in uterine arteries velocities (**Fig. 1**), placenta volume, and uteroplacental QV was documented.
- Women undergoing UN-HYST showed higher mean peak systolic (p=0.02), and mean end diastolic velocities (p=0.07) within the first 10 weeks after cesarean section than women with successful conservative clinical management (**Fig 1**).
- Patients having UN-HYST showed higher uterus/placental QV ((%), 31(4.1) vs. 13.6 (1.9); p<0.001) than those with successful clinical management (**Fig 2**).
- Among patients who opted for uterine preservation, placental tissue was no longer detectable at approximately 16 weeks postpartum.

Conclusion

- LIPS can be a valid alternative for patients with PAS to reduce the risk of IOP blood loss, or for uterus preservation
- Increased uterus-placenta QV, and Doppler velocities of the uterine arteries can provide important information on the risk of UN-HYST.