

ULTRASOUND-GUIDED TRANSVAGINAL THROMBIN INJECTION OF HYPERVASCULARIZED MYOMETRIUM AFTER SPONTANEOUS ABORTION

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INTRODUCTION

In the field of Gynecology, percutaneous ultrasound-guided thrombin injection (UGTI) has been used to treat vaginal bleeding in patients diagnosed with uterine artery pseudoaneurysm as an alternative to emergency arterial embolisation

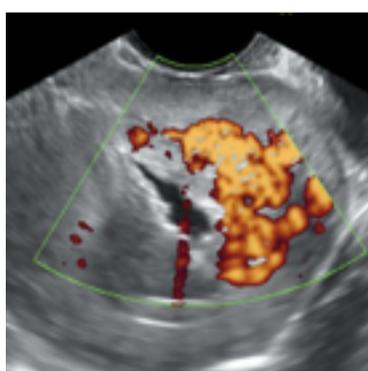
MATERIALS, PATIENTS AND METHODS

A 40-year-old woman (gravida 11, para 3) was referred to our hospital due to abnormal bleeding after a spontaneous abortion four months ago.

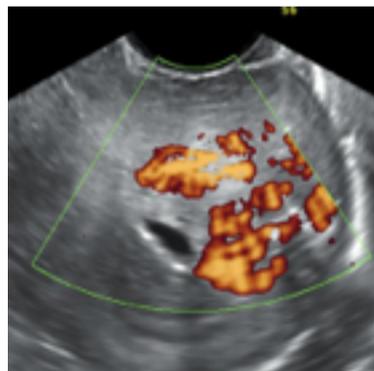
The ultrasonographic exam performed revealed an abnormal augmented vascularization in the anterior wall of the uterus. The endometrial cavity was homogenous. A pelvic CT angiography was done to confirm the lack of arteriovenous malformations or pseudoaneurysms.

As the patient wanted to fall pregnant again and after the failure of medical treatment, we decided to perform a UGTI in order to stop the abnormal vaginal bleeding.

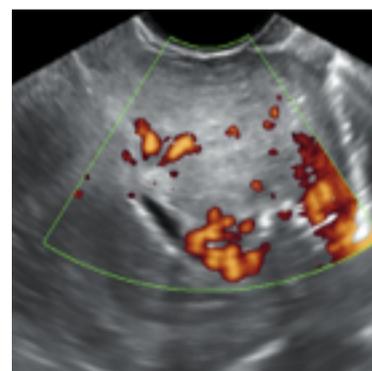
When performing the procedure, the patient was asked to void and was placed in the lithotomy position. Transvaginal ultrasound (TVUS) was performed using an endovaginal transducer. A 22-gauge biopsy needle was passed through the lateral vaginal fornix into the anterior wall of the uterus. The 30-cm long needle was inserted through a needle guide attached to the vaginal probe. 2 cm³ of thrombin (Tissucol®; Baxter Healthcare Corporation, Munich, Germany) were slowly injected into the anterior wall of the uterus.



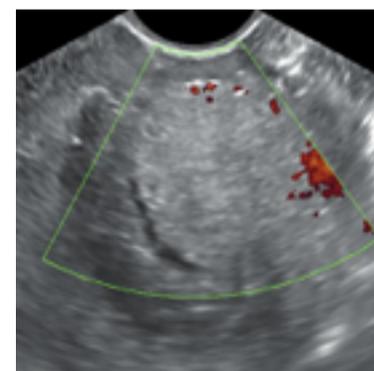
Before injection



After 20 seconds



After 40 seconds



After 60 seconds

RESULTS

After the treatment with thrombin, a vaginal ultrasound was done where we could objectify the immediate disappearance of the Doppler signal in the anterior wall of the uterus. The patient was discharged the same day.

One week after, a visit was scheduled. The patient was asymptomatic and presented no further haemorrhagic episodes.

CONCLUSION

Transvaginal UGTI may be used in selected patients with uterine bleeding and abnormal augmented myometrial vascularization. The application of this biological glue is a minimally invasive and selected treatment which could avoid more aggressive conducts. More research is needed to confirm the safety and feasibility of this procedure.