VIDEO

Targeted removal of a small gestational sac in early pregnancy loss via hysteroscopy: distinguishing the true gestational sac from two pseudogestational sacs and a submucosal fibroid

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Objective: To demonstrate the techniques and advantages of targeted gestational sac removal via hysteroscopy in a case of early miscarriage.
Design: Video article.
Subjects: A 41-year-old woman with a missed miscarriage at 7^{+1} weeks presented with a human chorionic gonadotropin level of 1,070 mIU/mL and an intrauterine gestational sac measuring 3.8 mm, which showed enhanced peripheral echogenicity without a visible yolk sac. Ultrasound identified three additional small hypoechoic areas within the uterine cavity, which were difficult to differentiate by ultrasound. The patient had a strong desire to preserve the chorionic villi for chromosomal analysis. However, the small size of the gestational sac and the presence of multiple hypoechoic lesions were expected to complicate the task of locating chorionic villi within the expelled products of conception after expectant management, medication, or suction aspiration. The patient(s) included in this video gave consent for publication of the video and posting of the video online including social media, the journal website, scientific literature websites (e.g., PubMed, ScienceDirect, and Scopus), and other applicable sites.
Exposure: Non-contact hysteroscopy was conducted without uterine probing or cervical dilation using HEOS-mini hysteroscope (Delmont, France). The true gestational and pseudogestational sacs and submucosal fibroids were identified and removed using a grasper. Intraoperative intravenous oxytocin (10 IU in 500 mL normal saline) was administered to enhance the visualization of fibroids. Surgical skills were discussed in detail. This study was approved by the Ethics Committee of The First Affiliated Hospital, Zhejiang University School of Medicine (IIT2024-0505).
Main Outcome Measures: Successful targeted removal of the gestational sac and intrauterine lesions.
Results: Cytogenetic analysis of the chorionic villi revealed a 45,XO karyotype. Histopathological findings confirmed the hysteroscopic diagnosis. The postoperative recovery was uneventful.
Conclusion: Targeted removal of the gestational sac in early pregnancy loss via hysteroscopy is both feasible and effective. It offers valuable diagnostic and therapeutic benefits for patients with recurrent pregnancy loss who require precise sampling or those with concurrent intrauterine abnormalities.

Key Words: Early pregnancy loss, hysteroscopy, pseudogestational sac

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Xiaoyan Guo: Writing – original draft, Visualization, Funding acquisition. **Yiqi Yu:** Writing – review & editing, Validation, Project administration. **Weihai Xu:** Formal analysis, Data curation. **Yanpeng Wang:** Writing – review & editing, Validation, Conceptualization. **Jing Shu:** Writing – review & editing, Validation, Funding acquisition, Conceptualization.

Declaration of Interests

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SUGGESTED READING

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